

A New Species of *Longitarsus* LATREILLE from Nepal
(Coleoptera, Chrysomelidae: Alticinae)

By BLAGOY GRUEV

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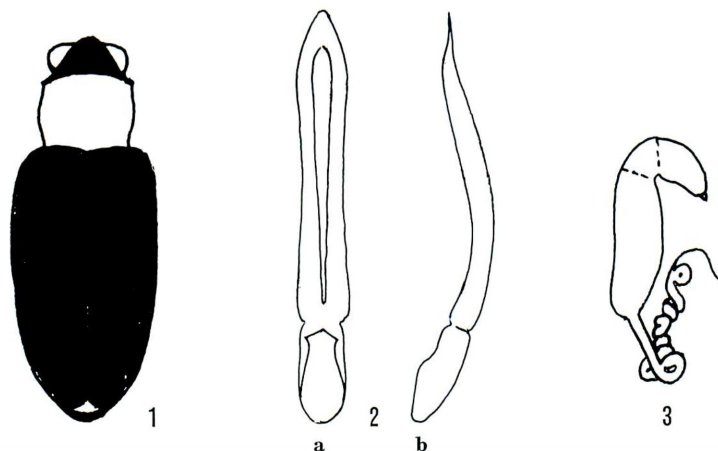
Longitarsus nepalensis sp. nov.

Type material. Holotype, ♂; Allotype, ♀: Solo Khumbu, Gumila, 2,500–2,600 m, 9. XI. 1987, leg. P. BERON (in: National Natural History Museum in Sofia, Bulgaria). Paratopotypes: 7 ♂♂ (in: National Natural History Museum in Sofia, Bulgaria), 1 ♂ (in: University of Kurume, Japan), 1 ♂ (in Museo Civico di Storia Naturale di Milano, Italy), 1 ♂, 1 ♀ (in: author's collection).

Diagnosis. The new species differs from all known species of the genus in having a unique coloration: head, elytron, legs and underside of body (except of prothorax) deeply black, pronotum yellow.

Description. Convex, moderately elongate (Fig. 1). Head, elytron, mesothorax, metathorax, abdomen, legs and last 8 segments of antenna deeply black, smooth and shining. Pronotum (except of a narrow transverse black line behind vertex) contrasting, yellow. Basal 3 segments of antenna yellow brown. Tarsal segments blackish brown.

Head, including eyes, narrower than pronotum. Frons nearly smooth, shining, without well limited frontal tubercles; frontal ridge raised and narrow but not sharp. Antenna about $\frac{3}{4}$ as long as length of body, segment 2nd shortest, 3rd slightly longer, 4th and 5th equal and longer than 3rd and shorter than each of 6th to 11th. Pronotum shining, narrower than elytra at base, about $1\frac{1}{3}$ as wide as long, with sides uniformly rounded, widest at middle, not clearly punctate. Elytron slightly rounded at side, strongly narrowed posteriorly, with strong shoulder tubercles, with very feeble, small and sparse punctures. Hind tibia without longitudinal ridge, slightly curved, with strong apical spine. Hind



Figs. 1-3. 1. View of body of *Longitarsus nepalensis* sp. nov. 2. Aedeagus of ditto. a, ventral view; b, lateral view. 3. Spermatheca of ditto.

wings completely developed.

Male. Anterior tarsal segment 1st moderately extended, narrower than 3rd. Last abdominal sternite without a deep depression. Aedeagus (Fig. 2) dark brown, long and narrow, with parallel sides; ventral side with a longitudinal furrow which is narrowed basally; profile nearly straight.

Female. Spermatheca (Fig. 3) with complicated ductus.

Length 2.9-3.4 mm.

Acknowledgements. Thanks are due to my friend Dr. P. BERON from the National Natural History Museum in Sofia for kind loan of specimens, and to Prof. Dr. S. KIMOTO from the University of Kurume for his valuable assistance.

A New *Melanotus*-species from Is. Mikura-jima
in Izu Archipelago
(Coleoptera : Elateridae)

“Some New Forms of Elateridae in Japan (XX)”

By TAKASHI KISHII

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In this paper, I would like to describe a new species of the genus *Melanotus* from Is. Mikura-jima in Izu Archipelago, Tokyo.

In early 1988, I received some materials of elaterid-beetles from some localities through the courtesy of Mr. NOBUYUKI NARUKAWA in Suzuka City. In the examples, I found some specimens of very unique *Melanotus*-species from Is. Mikura-jima collected by Mr. HIROSHI OTOBE in Tsu City. It had been the outward appearance of a new peculiar species, and as the result of my study with care, I convinced that is a new taxon of genus *Melanotus* undoubtedly.

Before going further, I wish to express my indebtedness to Mr. N. NARUKAWA with my deep gratitude for his kind offer of the peculiar materials stated above.

Melanotus (Melanotus) otobeanus sp. nov.

“Mikura-kushi-kometsuki”

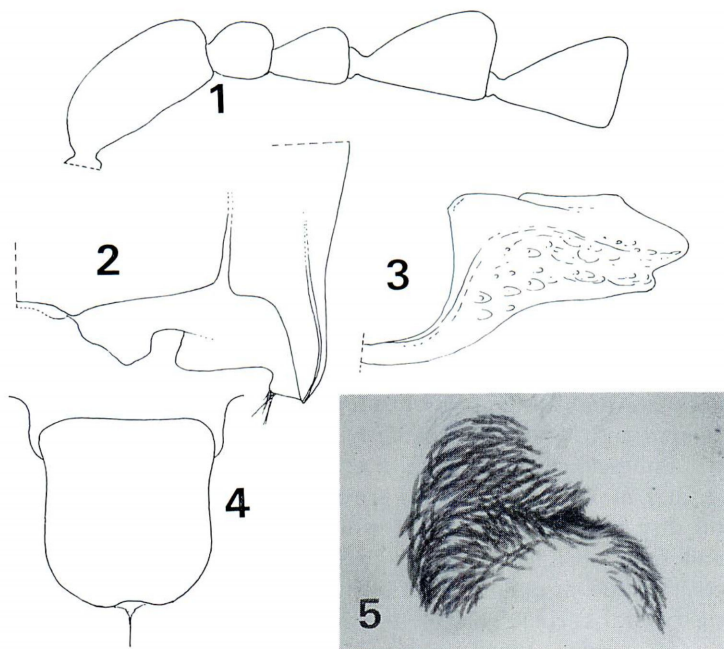
(Figs. 1-6)

Female, 11.85×3.15 mm (holotype), and 10.35 to 11.7 mm in length (5 isotypes). Rather robust, elongate, parallel-sided, subcylindrical, namely a little convex above medio-longitudinally, as well as underside more plainly. Moderately shining all over. Dark blackish brown to red, with antennae, latero-posterior parts of elytra, two or three terminal segments of abdomen, and legs wholly reddish brown or paler than general coloration. Pubescence long, rather erect, dense and generally even in density, and more or less golden-brown with distinct lustre, sometimes pronotal disc with partly a lot of white ones.

Head broad, slightly convex above between eyes with an obscure wide concavation at middle, distinctly and transversely depressed narrowly along frontal carina; relative width of each eye and vertical breadth across eyes in upper views as 16:77 on an average; anterior margin of frons well definedly carinated and ridged plainly, rounded forwards,

inconspicuously bifurcated posteriorly near bases; frontal groove broad, facing antero-downwards, with a shallow round concavation at middle, broadly excavated shallowly before each antennal sulcus, having no punctures but covered all over by minute shagreen-like sculptures; vertical punctures obviously large and dense, reticulated each other as a tortoise-shell form; interpunctate space clearly narrow, almost invisible, and more or less carinated; each puncture uneven in scale and form; bottom surface of each puncture broad, rather flattened having distinct minute shagreen-like sculptures with a long hair near middle.

Antennae short, with apical segment hardly attaining to base of each pronotal hind corner; relative joint lengths and widths from basal joint to fifth (fig. 1) as 28/13.5, 11/8.5, 12.5/9, 23/13.5 and 21/13 (holotype, length/width) respectively; basal joint thick and cylindrical, well rounded at anterior margin; second globular; third elongate triangular; fourth to tenth moderately serrated, but each serration degree gently reduced terminally, with apico-anterior angle of each joint rather rounded; eleventh rather elongate, oblong-ovate, slightly longer than tenth.



Figs. 1-5. 1. antenna, 5 basal joints; 2. latero-posterior angle of pronotum; 3. prosternal process in profile; 4. scutellum; 5. thorny construction of female bursa copulatrix.

Pronotum more or less spherical, roundly and simply convex above medianly, not so elongate, widest before the middle, then roundly and gently converging anteriorly as well as posteriorly to base of each rear angle, which is rather parallel-sided at base, then scarcely divergently widened outwards before the apex; relative measurement of median length and breadth as 85:93; postero-lateral angles (fig. 2) broad, rather short, each with acute unication, which extends slightly over the base of each angle, with 7 or 8 setigerous hairs at postero-apical edge of propleuron continuing from pronotal rear angle; basal furrows distinct, rather long and wide at each posterior end; punctures somewhat resembling vertical ones in size, form and density, and surface condition on lateral border, but being progressively sparse and small medianly, and on basal slope moderately sparse, small and not ocellated with remarkable interpunctate space, which is smooth entirely and rather wider than each puncture diameter.

Scutellum (fig. 4) rather quadrate, subparallel-sided, feebly declivous anteriorly, flattened generally or somewhat having a shade of median impression; frontal edge straightened, well carinated, a little elevated roundly with lateral angles slightly widening outwards from anterior ends of lateral sides; hind apex rounded, not pointed posteriorly, but sometimes slightly excavated; relative median length and width as 27:25; punctures large, dense, uneven in size, and rather reticulated mutually.

Elytra rather parallel-sided, but weakly expanded outwards behind middle, well convex above medianly; sutural length including scutellum and humeral breadth relatively as 100:35; striae distinct having generally deep, elongate, rather sparse and uneven punctures which not continue each other by narrow groove, though the first striae punctures plainly smaller, more elongate and denser than those of other striae; interstriae surface longitudinally elevated and smooth wholly, with single, sparse and minute punctures irregularly; sutural ends moderate, or in some paratypes obsolescently pointed.

Prosternal punctures somewhat allied to those of lateral borders of pronotum on anterior rim, but being gently a little smaller and sparser and uneven in size on median surface; interpunctate surface clear and smooth entirely. Prosternal process in profile (fig. 3) conspicuously bent inwards behind procoxal cavities, then obliquely and substraightly extending backwards; posterior end with a small excavation. Prosternopleural sutures very broad, smooth and substraight medianly, with anterior ends distinctly excavated. Propleural punctures elongate in form longitudinally, smaller, sparser and evener than those of prosternal surface. Mesosternal groove elongate rhombic with sides clearly concave

inwards. Mesosternal punctures dense, small, single and rounded. Metasternal punctures more or less similar to propleural ones, but a little denser. Legs rather stout. Bursa copulatrix with an elongate triangular construction of many thorns (fig. 5).

Male unknown.

Holotype and 5 isotypes, females, Is. Mikura-jima in Izu Archipelago, Tokyo Met., May 25, 1987, HIROSHI OTOBE leg. Two isotypes are deposited in the collection of Mr. N. NARUKAWA.

In the general structures, this new peculiar *Melanotus*-species cannot find out the resembler from Japan and the adjacent area. However, in some outline it allies in a way to *Melanotus senilis*, but the former is smaller and reddish brown in general body colour. New name is dedicated to Mr. H. OTOBE in Tsu City, Mié Prefecture, the first finder of this unique *Melanotus*.

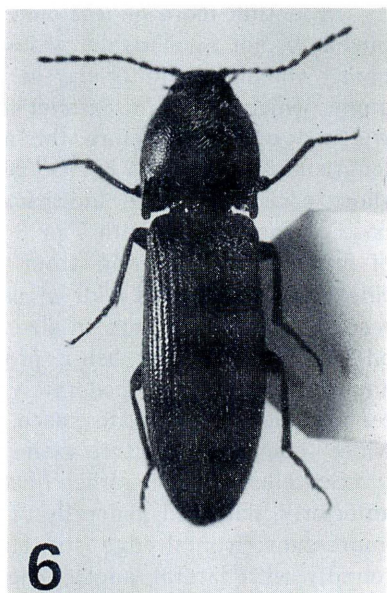


Fig. 6. *Melanotus (Melanotus) otobeanus* sp. nov.

Holotype, ♀, Is. Mikura-jima, May 25, 1987, H. OTOBE leg., 11.8 mm.

Notes on Catopidae from Taiwan (I)

By YASUHIKO HAYASHI

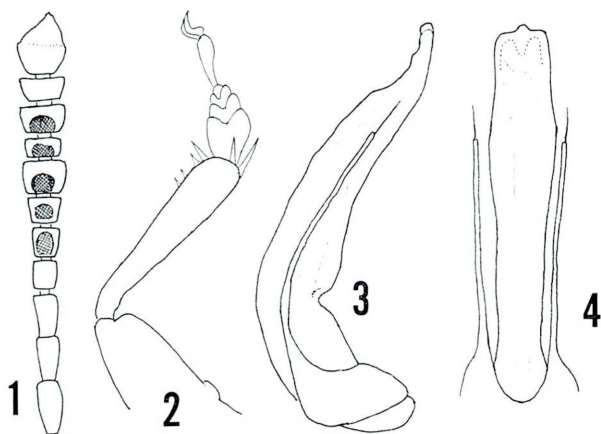
Up to the present time only two catopid species have been known from Taiwan. One of them is *Ptomaphagus sauteri* (PORTVIN) and the other is *Catops hilleri* KRAATZ, but the latter was recorded by H. KONO, 1935 with a question mark. SZYMCAKOWSKI, 1964 has indicated that *hilleri* may be misidentified and perhaps is not distributed in Taiwan. I also have the same view with him, so that I think *hilleri* might be excluded now from Taiwanese fauna. Thus, the only one species, *Ptomaphagus sauteri*, is exactly known from Taiwan.

In the first note of this series, I am going to report four *Catops*-species of Taiwan, one new species, one new subspecies and two known species, and wish to express my hearty thanks to Mr. T. SHIBATA for his constant guidance and help on my taxonomic research. And I am greatly indebted to the members of Osaka Coleopterological Society for their kind help in many materials.

Catops continentalis SCHWEIGER (Figs. 1-4)

Catops hilleri ssp. *continentalis* SCHWEIGER, 1956, Beitr. Ent., 6 : 539, fig. 6.

Catops hilleri ssp. *continentalis* : SZYMCAKOWSKI, 1961, Acta zool. cracov., 6 : 132.



Figs. 1-4. *Catops continentalis* SCHWEIGER, ♂.

1. antenna; 2. foreleg; 3. genitalia, lateral view; 4. ditto, dorsal view.

Catops continentalis: SZYMCAKOWSKI, 1964, ditto, 9 (2): 220-222, figs. 229, 240, 243 and 244 (partim, nec "type" ♀).

Examined materials: 4 ♂♂, 1 ♀, Fenchifu, Chiai Hsien, 26 and 27. III. 1970, T. KOBAYASHI leg.

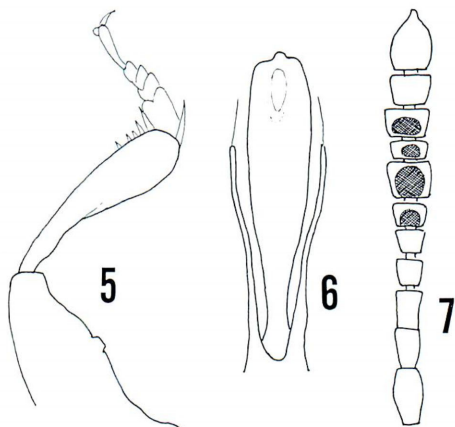
The examined materials well agree with SZYMCAKOWSKI's redescription, 1964 of this species.

Notes: In ♂ antennae distinctly depressed on underside of 5th to 9th segments, the depression on 5th segment large and shallow but the rest rather small and very deep, and each bottom of the depressions strongly asperate-subreticulate and not pubescent.

This species belongs to *hilleri*-group*, in view of the presence of peculiar depression on some antennal segments, small tubercle on profemora and similar form in the male genitalia. And this species is rather closely related to *C. tanbaensis* HAYASHI from Japan in having similar structure of male genitalia.

* On the features of *hilleri*-group (Figs. 5-7)

In the male of *Catops hilleri* KRAATZ (sense in lit. JEANNEL 1936, SZYMCAKOWSKI 1964 and HAYASHI 1987) the antennae are distinctly depressed beneath from 6th to 9th segments, each bottom of the depressions is subreticulately microsculptured and not pubescent, the profemur bears a small tubercle on under side, and the median lobe of the genitalia is subtruncate at the apex, the apex bears a small tubercle at the middle. Therefore the *hilleri*-group is characterized, I should think, by the following triad of the male:— 1. antennae have a peculiar depression on each of some intermediate segments, 2. underside of profemur bears a small tubercle, 3. median lobe of genitalia is subtruncate at apex, and the apex has a small tubercle.



Figs. 5-7. *Catops hilleri* KRAATZ, ♂.

5. foreleg; 6. genitalia, dorsal view; 7. antenna.

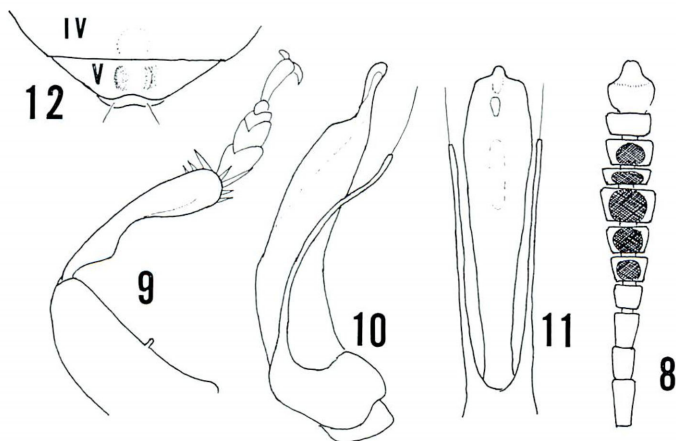
1. antennae have a peculiar depression on each of some intermediate segments, 2. underside of profemur bears a small tubercle, 3. median lobe of genitalia is subtruncate at apex, and the apex has a small tubercle.

Catops taiwanensis sp. nov. (Figs. 8-12)

Body oblong-oval, rather lustreless and covered with pale brownish recumbent pubescence; black, mouth organs (mandibles pitchy) and basal 1 or 2 antennal segments yellowish brown, pronotum with lateral margins finely pale yellow, elytra weakly opalescent posteriorly, and legs blackish brown, with protarsi somewhat lighter. Length: 2.5-3.5 mm.

♂: Head two-thirds as wide as pronotum, moderately and rather closely punctured, microsculpture obscurely reticulate. Eyes moderate in size. Antennae (fig. 8) thick, comparatively short, not reaching pronotal base; basal 3 and 11th segments much and 4th a little longer than wide, the rest distinctly wider than long; 1st segment longer than 3rd (1.3 : 1), 2nd a little shorter than 3rd, 3rd to 6th decreasing distally in length, 3rd slightly dilated apically as usual and somewhat longer than 7th, 4th nearly as long as 9th, 5th shorter than 7th (7 : 10) or 10th (10 : 10.4), 7th the widest and twice as long as 8th, 8th a little less than half as long as wide and a little more than half as long as 9th, which is a little longer than 10th, 11th pear-shaped, slightly longer than 1st and a little less than twice as long as 10th; 5th to 9th segments strongly depressed beneath, each bottom of the depression strongly microgranulate and not pubescent.

Pronotum half wider than long, three-fourths as wide as and one-third as long as elytra, widest at middle, more strongly and arcuately narrowed anteriorly than posteriorly; apical margin weakly emarginate, basal one gently arcuate and very weakly bisinuate medianly; basal angles obtuse but well marked; surface finely and rather closely granulate-punctate, without microsculpture. Elytra half longer than wide, widest at basal one-third, rather finely, weakly and sparingly granulate-punctate, with fine, weak and lineate microsculpture, without



Figs. 8-12. *Catops taiwanensis* sp. nov., ♂ (8-11), ♀ (12).

8. antenna; 9. foreleg; 10. genitalia, lateral view; 11. ditto, dorsal view; 12. 4th, 5th and 6th abdominal sternites.

traceable striae except distinct sutural one.

Mesosternum finely and very sparsely granulate-punctate, somewhat uneven and distinctly reticulo-linearly microsculptured in middle area, but even and only linearly in lateral area. Metasternum finely and not closely punctate and subreticulately microsculptured. Abdominal sternite rather finely and closely granulate-punctate and very weakly reticulate.

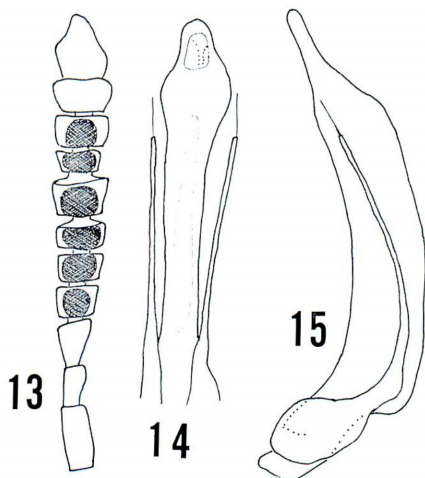
Legs rather slender; profemora (fig. 9) bearing an elongate and thin tubercle at basal two-fifths of under side; protibiae gently curved inward and deeply sinuate at inner margin except basal one-fourth; basal 3 segments of protarsi and basal one of mesotarsi fairly dilated; meta-femora weakly depressed beneath near apex.

Median lobe of genitalia (figs. 10-11) stout, gently curved ventrally, and abruptly flattened distally from apical one-fourth, in dorsal view gradually thickened from base to apical one-fourth, thence more gently narrowed to subtruncate apex, the apex medianly with a small tubercle, the apical flattened part with a small, semitransparent and longitudinal fenestra in the middle; lateral lobes slender, moderately long, each with a long hair at tip, the hair reaching the level of top of median lobe.

♀: Fourth antennal segment almost as long as wide, 5th to 9th segments not depressed, 9th and 10th the widest, 8th much shorter, a little more than one-third as long as 7th or nearly one-fourth as long as wide and less than half as long as 9th, which is nearly equal in length to 10th; legs slender and simple as usual; 4th abdominal sternite (fig. 12) weakly depressed before middle of apical margin, 5th clearly, deeply and widely depressed along the middle.

Holotype: ♂ and allotype: ♀, Mt. Yushan, Nantou Hsien, 2. VIII. 1974, Y. KIYOYAMA leg. (in coll. T. SHIBATA). Paratype: 3 ♂♂, same data as the holotype; 2 ♂♂, 1 ♀, Tungpu Spa, Nantou Hsien, 2. VIII. 1974, Y. KIYOYAMA leg.; 1 ♂, Mt. Houhuan, Nantou Hsien, 2. V. 1982, T. ITO leg.

This new species well resembles *C. nomurai* Y. HAYASHI (figs. 13-15) from Japan in general appearance, but in the latter the 3rd antennal segment is conspicuously thickened apically (even in ♀), the 4th one is rather transverse, the



Figs. 13-15. *Catops nomurai* Y. HAYASHI, ♂.

13. antenna; 14. genitalia, dorsal view;
15. ditto, lateral view.

pronotum is obviously microsculptured and the apex of median lobe of the male genitalia is not truncate and rounded. The new species belongs obviously to *hilleri*-group in having the similar form of male genitalia, antennae and profemora, however, it is closely related to *C. tuberculatus* SZYMCAKOWSKI (a member of *hilleri*-group) from Burma. And the new species is easily distinguished from *tuberculatus* as the followings: in the new species the 4th antennal segment is only very slightly longer than wide, the male protibiae are incurved and deeply sinuous inside, the median lobe of male genitalia has a semitransparent fenestra on the apical part, while in *tuberculatus* the 4th antennal segment is much longer than wide (1.5:1), the male protibiae are straight and not sinuate inside and the median lobe of the male genitalia without semitransparent fenestra.

Catops klapperichi SCHWEIGER (Figs. 16-19)

Catops klapperichi SCHWEIGER, 1956, Beitr. Ent., 6 : 540, fig. 7.

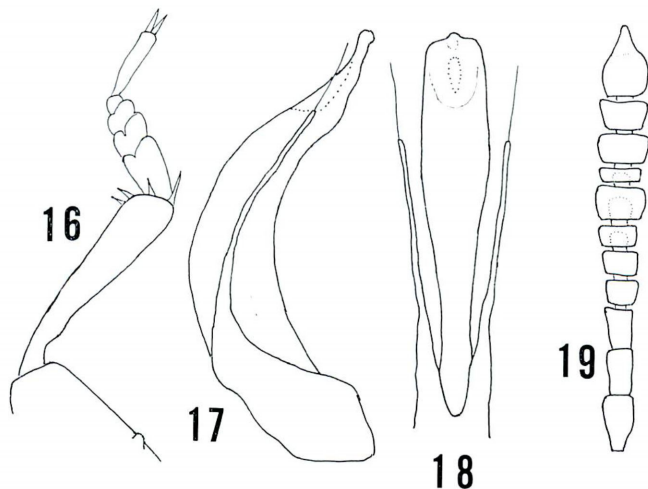
Catops klapperichi: SZYMCAKOWSKI, 1961, Acta zool. cracov., 6 : 132.

Catops klapperichi: SZYMCAKOWSKI, 1964, ditto, 9 (2) : 223-228, figs. 245-251. (partim)

Examined material: 1 ♂, Sungkang, Nantou Hsien, 10. V. 1978, K. ANDO leg.

The examined material exactly corresponds with the redescription of SZYMCAKOWSKI, 1964 except some trifling characters, e.g. median lobe of male genitalia in Taiwanese specimen is a little more strongly tapered basally than that of the figure in SZYMCAKOWSKI.

Notes: Antennae somewhat depressed beneath from 6th to 8th segments, and



Figs. 16-19. *Catops klapperichi* SCHWEIGER, ♂.

16. foreleg; 17. genitalia, lateral view; 18. ditto, dorsal view; 19. antenna.

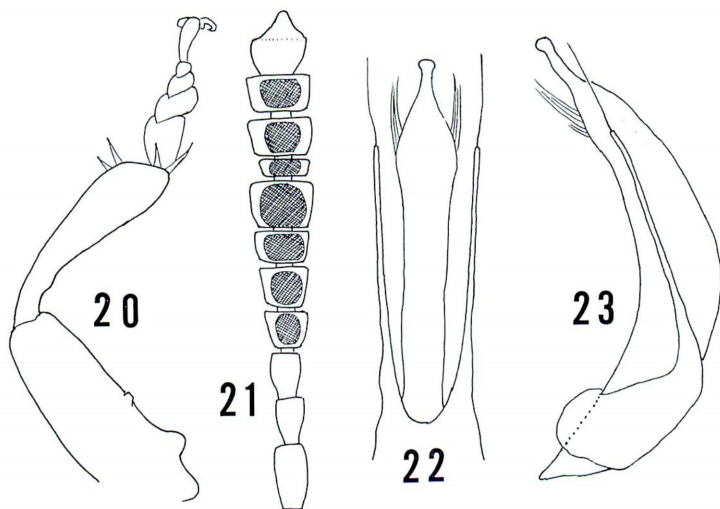
each bottom of the depression without peculiar microsculpture, which is present in *hilleri*. Median lobe of the male genitalia sharply ridges medianly in basal half of ventral side.

This species much differs from *hilleri* in deficiency of the peculiar depression on some antennal segments, however, from the viewpoint of the similar form of the male genitalia and profemora, it should be placed near true *hilleri*-group and much closer than the following species.

Catops miensis formosensis ssp. nov. (Figs. 20-23)

Body stout, less shining and covered with yellowish brown recumbent pubescence and darker in color, mouth organs yellowish brown, antennae brown with the basal 2 or 3 segments sordid yellow, legs blackish brown with tarsi pale brown. Length: 3.3-4.4 mm.

♂: Head rather coarsely punctate and with microsculpture weak and subreticulate. Eyes larger but practically moderate in size. Antennae (fig. 21) with 1st segment much longer than 3rd (1.7:1), 2nd a little shorter than 3rd and nearly as long as 4th, 3rd to 6th a little shorter than each preceding, 4th a little longer than wide, 5th a little and 6th to 10th much wider than long, 5th nearly as long as 9th or 10th, 6th a little more than 0.7 times as long as 7th, 7th the thickest as well as 9th



Figs. 20-23. *Catops miensis formosensis* ssp. nov., ♂.

20. foreleg; 21. antenna; 22. genitalia, dorsal view; 23. ditto, lateral view.

or 10th, fairly longer than 3rd (1.2 : 1) and twice as long as 8th, 8th a half as long as wide, 9th and 10th similar to each other, 11th the longest and twice as long as 10th; 4th to 10th segments clearly depressed beneath, the depressions rather large and deep, and each bottom of the depressions strongly and microscopically reticulo-granulate and not pubescent (in *miensis miensis* NAKANE the depression on 4th, 9th and 10th very weak, indistinct, and without peculiar microsculpture on each bottom).

Pronotum a half wider than head, three-fourths as wide as and a little more than one-third as long as elytra, roundedly and more strongly narrowed forward from basal one-third than backward; granulated-punctures on disc moderate in size and density. Elytra nearly two-thirds as wide as long, widest at middle, vaguely depressed before middle; punctures on disc larger but practically moderate in size and density, and microsculpture stronger than on pronotum.

Mesosternum rough, reticulo-linearly microsculptured on median area but only linearly so on lateral area, and without visible punctures. Metasternum very minutely and sparingly granulate-punctate, with fine reticulate microsculpture. Abdominal sternites rather finely and densely granulate-punctate, but the punctures on basal sternite less dense than on the others; apical margin of 6th sternite with a small notch at middle.

Legs stouter; protibiae (fig. 20) thicker, feebly incurved, and with inner margin less emarginate; profemora bearing a smaller tubercle beneath.

Median lobe of genitalia (figs. 22-23) rather thick, nearly parallel-sided in basal three-fourths, gently swollen at about apical one-fourth, thence abruptly convergent to subacute apex, the apex narrowly rounded at tip and a little thickened (shape of the apex somewhat variable), dorsal side of apical part weakly and narrowly sulcate along the middle, and ventral surface of the apical swelling with a tuft of several long soft setae on each lateral side; lateral lobes longer, nearly 0.8 times as long as median lobe, and with a long hair at tip, the hair reaching top of median lobe.

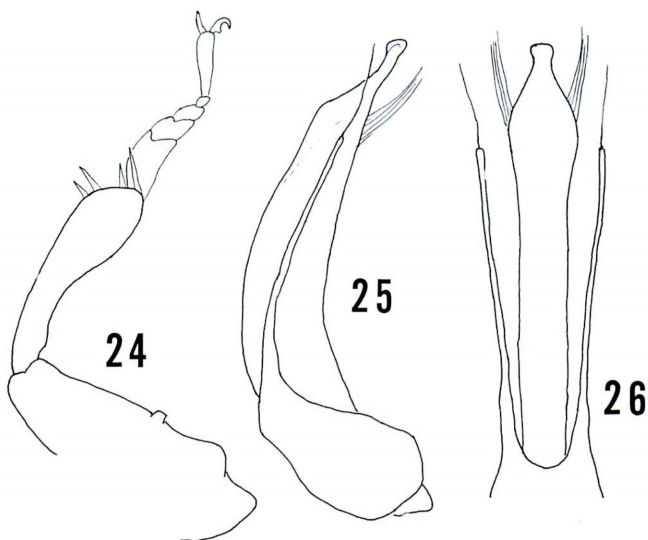
♀: Antennae somewhat slenderer than in ♂, 4th segment much shorter than 3rd (1 : 1.3, but in ♂ 1 : 1.1), 5th nearly as long as 6th, 7th less wide than long (1.2 : 1) and a little more than twice as long as 8th, which is less than half as long as wide, 4th to 9th segments not depressed; abdominal sternites evenly, more coarsely and densely punctate than in ♂, apical margin of 6th sternite shallowly and narrowly emarginate at middle; legs slender and simple as usual.

Holotype: ♂ and allotype: ♀, Mt. Yushan, Nantou Hsien, 2. VIII. 1974, Y. KIYOMAMA leg. (in coll. T. SHIBATA). Paratypes: 1 ♂, 1 ♀, Mt. Alishan, Chiai Hsien, 15.

V. 1968, Y. HAYASHI leg. and 3. V. 1983, T. ITO leg.; 2 ♂♂, 3 ♀♀, Tungpu spa, Mt. Yushan, Nantou Hsien, 2. VIII. 1974, Y. KIYOYAMA leg.; 10 ♂♂, 10 ♀♀, Sungchuangkang (alt. 2,400 m), Nantou Hsien, 27. V. 1986, Y. SHIBATA leg. (through the kindness of Mr. M. NISHIKAWA).

Examined materials: 32 exs., Sungchuangkang (alt. 2,400 m), Nantou Hsien, 27. III. and 27. V. 1986, Y. SHIBATA leg. (through the kindness of Mr. M. NISHIKAWA).

This new subspecies is very similar in general appearance to *C. nomurai* Y. HAYASHI (figs. 13–15), but in the new subspecies 4th antennal segment is a little but distinctly longer than wide, male protibiae are only shallowly emarginate at inner margin, median lobe of the male genitalia is subacute at apex and underside with a pair of tufts of soft setae, while in *nomurai* 4th antennal segment is distinctly wider than long (♂) or at most nearly as long as wide (♀), male protibiae are deeply emarginate at inner margin, median lobe of the male genitalia is not acute and rounded at apex and without any tuft of setae.



Figs. 24–26. *Catops miensis miensis* NAKANE, ♂.

24. foreleg; 25. genitalia, lateral view; 26. ditto, dorsal view.

Notes: Although male genitalia of *Catops miensis miensis* NAKANE (figs. 24–26) from Japan is very different in comparison with those of *hilleri*-group, when the similar features of male profemora and antennae for the group are considered, this species should be placed near *hilleri*-group.

Study of Asian Cetoniinae (IV)

Notes on the Genus *Cosmiomorpha* from Japan (Ryukyu) and Taiwan (Scarabaeidae, Coleoptera)

By KIMIO MASUMOTO¹⁾ and KAORU SAKAI²⁾

Abstract The genus *Cosmiomorpha* SAUNDERS, 1852, from Japan (Ryukyu) and Taiwan is examined. A new species, *Cosmiomorpha (Microcosmiomorpha) taiwanomontanus* is described, and *C. (M.) horni* BOURGOIN, 1931, is regarded as a good species.

Introduction

The genus *Cosmiomorpha* SAUNDERS, 1852, comprises six species from the Oriental Region. From Japan (Ryukyu) and Taiwan, two species are recorded: *C. (Cosmiomorpha) sauteri* BOURGOIN, 1931, *C. (Microcosmiomorpha) similis* FAIRMAIRE, 1899. The latter is separated into four subspecies: *C. similis similis* FAIRMAIRE, 1899, *C. similis nigra* NIJIMA et KINOSHITA, 1927, *C. similis miyakoana* NOMURA, 1964, *C. similis yonakuniana* NOMURA, 1964.

The present authors have examined a great many material specimens from these districts, and have concluded that there occur four species, one of which including four subspecies. Those species belong to two subgenera. The authors are going to describe a new species occurring in the montane zone of Taiwan, and also treat *C. horni* BOURGOIN, 1931, which has been regarded as a synonym of *C. similis similis* FAIRMAIRE, as a good species.

The authors wish to express their sincere gratitude to Dr. YOSHIHIKO KUROSAWA, former chief of Zoology, National Science Museum (Nat. Hist.), Tokyo, Dr. ROGER-PAUL DECHAMBRE, Muséum National d'Histoire Naturelle, Paris, and Mr. LES JESSOP, British Museum (Nat. Hist.), London, for their invaluable advice and assistance to this study. Thanks are due to Mr. YOSHIKAZU MIYAKE, Tama City, Mr. HIROKAZU KOBAYASHI, Tokyo, and Mr. HANMEI HIRASAWA, Matsumoto City, for their contributions of the specimens.

Key to the species based on the males

1. Total length of protibia and protarsus more than 0.7 times length of body; first segment of protarsus about 1.5 times length of second. Head with apex fairly deeply

1) NIC 505, 1-1-1, Iwama-cho, Hodogaya-ku, Yokohama 240, Japan.

2) 2-9-18, Higashiyaguchi, Ota-ku, Tokyo 146, Japan.

[Ent. Rev. Japan, Vol. XLIII, No. 2, pp. 115-121, Dec., 1988]

- indented at the middle. Pronotum noticeably convex. Mesosternal process elongate with apex straightly truncate. Dorsal surface almost hairless. Body length: 20.5–25.0 mm. *Cosmiomorpha* (*Cosmiomorpha*) *sauteri*
- Total length of protibia and protarsus less than 0.6 times length of body; first segment of protarsus as long as second. Head with apex only slightly emarginate at the middle. Pronotum weakly convex. Mesosternal process rather short, with apex rounded. Dorsal surface haired. 2
2. Protibia rather wide with two outer teeth; hairs on dorsal surface long and fine. Body length: 16.4–20.2 mm. *Cosmiomorpha* (*Microcosmiomorpha*) *horni*
- Protibia slender, with one outer tooth; hairs on dorsal surface fairly short and often bold. 3
3. Body rather narrower; hairs on dorsal surface comparatively fine. Body length: 17.8–20.9 mm. *Cosmiomorpha* (*Microcosmiomorpha*) *taiwanomontanus* sp. nov.
- Body a little wider; hairs on dorsal surface short and bold. 4
4. Interocular space flat; body reddish brown. Body length: 18.6–21.3 mm. *Cosmiomorpha* (*Microcosmiomorpha*) *similis similis*
- Interocular space weakly ridged longitudinally; body dark reddish brown to black. 5
5. Hairs on dorsal surface dense. Body length: 19.2–23.2 mm. *Cosmiomorpha* (*Microcosmiomorpha*) *similis nigra*
- Hairs on dorsal surface sparse. 6
6. Body black; hairs on dorsal surface comparatively less sparse. Body length: 17.5–21.0 mm. *Cosmiomorpha* (*Microcosmiomorpha*) *similis yonakuniana*
- Body dark reddish brown; hairs on dorsal surface comparatively sparser. Body length: 18.6–21.9 mm. *Cosmiomorpha* (*Microcosmiomorpha*) *similis miyakoana*

Cosmiomorpha (*Cosmiomorpha*) *sauteri* BOURGOIN, 1931

(Figs. 1 & 2)

Cosmiomorpha sauteri BOURGOIN, 1931, Bull. Soc. nat. Luxembourg (n. s.), 41 : 45.

Cosmiomorpha (*Cosmiomorpha*) *sauteri*: MIKŠIĆ, 1977, Mon. Cetoniinae paläark. orient. Reg., 2 : 365.

Distribution: Taiwan (Palin, Lalashan, Howenshan, Nanshanchi, Maliburu).

Specimens examined: 53 ♂♂, 30 ♀♀.

Cosmiomorpha (*Microcosmiomorpha*) *similis similis* FAIRMAIRE, 1899

(Figs. 3, 4 & 13)

Cosmiomorpha similis FAIRMAIRE, 1899, Ann. Soc. ent. France, 68 : 621.

Cosmiomorpha (*Microcosmiomorpha*) *similis*: MIKŠIĆ, 1977, l. c.: 356.

Distribution: Taiwan (Tatungshan, Wulai, Kueishan, Shuangchi).

Specimens examined: 25 ♂♂, 7 ♀♀.

Notes. The species is the first *Cosmiomorpha* described from Taiwan. The present authors have recognized three species belonging to the subgenus *Microcosmiomorpha* from Taiwan. Judging from the original description, the authors have

thought the species occurring in the submontane zone of northern Taiwan to be *C. (M.) similis similis* FAIRMAIRE. The characteristics of the species are as follows: Body reddish brown; dorsal surface densely, thickly clothed with short and bold hairs; total length of protibia and protarsus about 0.6 times length of body; mesosternal process short, gradually narrowed towards apex.

At Wulai, in northern Taiwan, this species found in coexistence with *C. (M.) horni* BOURGOIN.

Cosmiomorpha (Microcosmiomorpha) similis nigra

NIIJIMA et KINOSHITA, 1927

(Figs. 5 & 6)

Cosmiomorpha similis var. *nigra* NIIJIMA et KINOSHITA, 1927, Res. Bull. Coll. Agr.

Hokkaido Imp. Univ., Sapporo, Japan, 4 : 69.

Cosmiomorpha similis nigra: NOMURA, 1964, Ent. Rev. Japan, 16 : 57, pl. 8, fig. 14.

Distribution: Ryukyu (Ishigaki Is., Iriomote Is.).

Specimens examined: 25 ♂♂, 12 ♀♀.

Cosmiomorpha (Microcosmiomorpha) similis miyakoana NOMURA, 1964

(Fig. 7)

Cosmiomorpha similis miyakoana NOMURA, 1964, Tōhō-Gakuho, 14 : 70.

Cosmiomorpha (Microcosmiomorpha) similis miyakoana: MIKŠIĆ, 1977, l. c. : 358.

Distribution: Ryukyu (Miyako Is.).

Specimens examined: 3 ♂♂, 1 ♀.

Cosmiomorpha (Microcosmiomorpha) similis yonakuniana NOMURA, 1964

(Fig. 8)

Cosmiomorpha similis yonakuniana NOMURA, 1964, Ent. Rev. Japan, 16 : 57, pl. 8, fig. 13.

Cosmiomorpha (Microcosmiomorpha) similis yonakuniana: MIKŠIĆ, 1977, l. c. : 357.

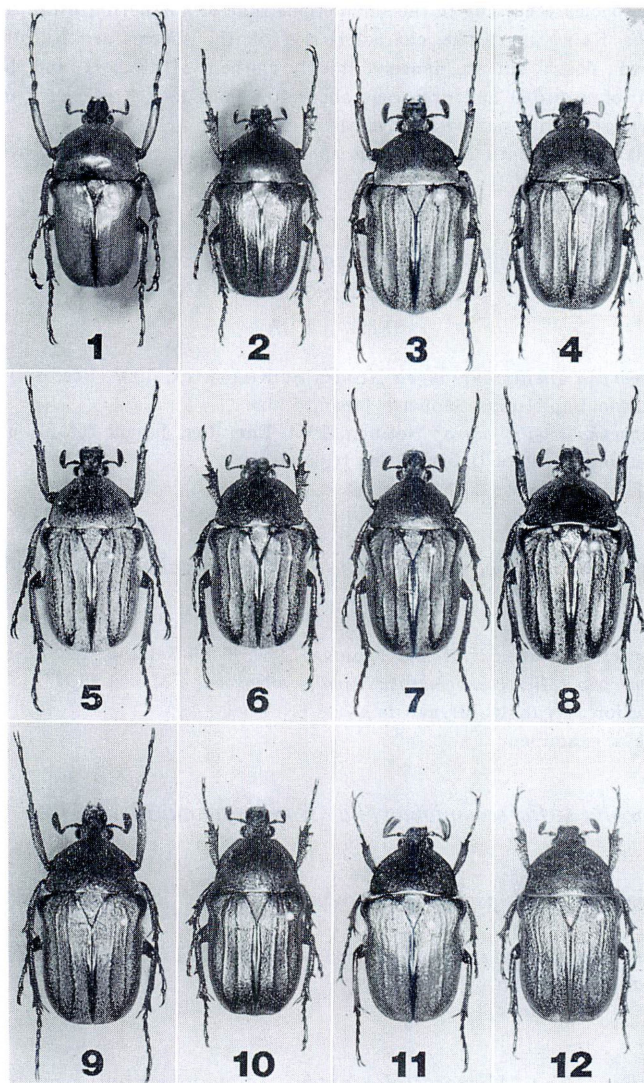
Distribution: Ryukyu (Yonakuni Is.).

Specimens examined: 3 ♂♂.

Cosmiomorpha (Microcosmiomorpha) taiwanomontanus sp. nov.

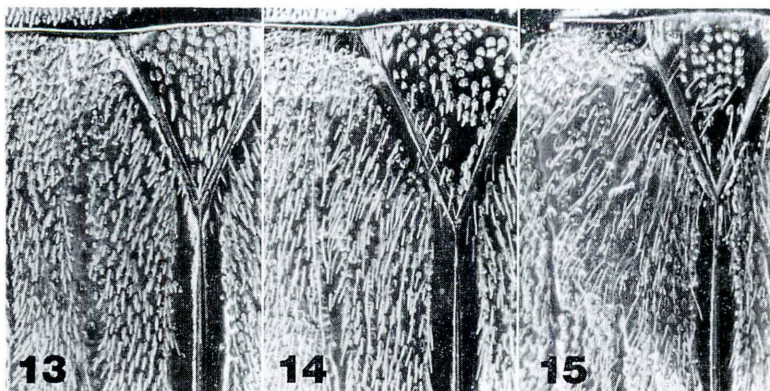
(Figs. 9, 10 & 14)

Male: Body reddish brown to blackish brown, with head, pronotum, scutellum and sutural portion of elytra blackish brown; dorsal surface except elytral ridges densely clothed with fine hairs, which are neither long like *C. (M.) horni* nor bold like *C. (M.) similis similis*. Ventral surface (except underside of mesosternal process, middle of metasternum,



Figs. 1-12. Dorsal views of *Cosmiomorpha* spp.

1, *C. sauteri* BOURGOIN, ♂; 2, ditto, ♀; 3, *C. similis similis* FAIRMAIRE, ♂; 4, ditto, ♀; 5, *C. similis nigra* NIIJIMA et KINOSHITA, ♂; 6, ditto, ♀; 7, *C. similis miyakoana* NOMURA, ♂; 8, *C. similis yonakuniana* NOMURA, ♂; 9, *C. taiwanomontanus* sp. nov., ♂, Holotype; 10, ditto, ♀, Paratype; 11, *C. horni* BOURGOIN, ♂; 12, ditto, ♀.



Figs. 13-15. Hairs on dorsal surface of *Cosmiomorpha* spp.

13, *C. similis similis* FAIRMAIRE, ♂; 14, *C. taiwanomontanus* sp. nov., ♂;
15, *C. horni* BOURGOIN, ♂.

and that of each abdominal segment) also densely clothed with hairs like those on dorsal surface.

Head rather elongate, closely scattered with large punctures; lateral margins ridged and subparallel, of which outer portions are produced; apex reflexed and slightly emarginate medially.

Pronotum about 1.5 times as wide as long, closely punctate; lateral margins gently produced, slightly sinuous posteriorly; hind margin nearly straight. Scutellum rather elongate triangular, evenly punctate.

Elytron with three distinct ridges (including sutural one); intervals closely punctate; apices acutely pointed.

Pygidium finely and closely punctate.

Mesosternal process short, basal portion rather subparallel and apex rounded. Metasternum with a median longitudinal groove, densely haired throughout except medial portion.

Abdomen with median longitudinal groove between 2nd and 4th sternites.

Protibia slender, with a tooth at apex, inner spine rather long and curved outwards apically; protarsus about as long as protibia, 1st segment shorter than 2nd or nearly same length as the latter; total length of protibia and protarsus less than 0.6 times length of body.

Female: Compared with male, body smaller, less densely haired on dorsal surface, especially pronotum almost bare; abdominal groove absent; protibia wider and armed with three distinct outer teeth.

Body length: 17.0-20.9 mm.

Holotype: ♂, Palin, Taoyuan Hsien, Taiwan, 10. VII. 1985, LU CHINCHI leg. Para-

types: Palin, 46 ♂♂, 23 ♀♀, 10-11. VII. 1985, LU CHINCHI leg., 3 ♂♂, 2 ♀♀, 8-10. VIII. 1985, LU CHINCHI leg., 1 ♂, 20. VII. 1978, T. SHIMOMURA leg., Lalashan, Taoyuan Hsien, 21 ♂♂, 7 ♀♀, 18-19. VII. 1985, LU CHINCHI leg., Sungkang, Nantou Hsien, 1 ♂, 4. VII. 1982, LU CHINCHI leg., 1 ♂, 17. VI. 1982, LU CHINCHI leg.; Howenshan, Nantou Hsien, 23 ♂♂, 3 ♀♀, 7-8. VII. 1985, LU CHINCHI leg.

The holotype is deposited in the National Science Museum (Nat. Hist.), Tokyo, and some paratypes are preserved in the British Museum (Nat. Hist.), London and also in the Muséum National d'Histoire Naturelle, Paris.

Notes. This new species occurs in the montane zone of northern and central Taiwan. It is similar to *C. (M.) similis similis*, but can be distinguishable from the latter by the body usually more blackish; the hairs on the dorsal surface finer; the mesosternal process is subparallel-sided in the basal half and rounded at the apex.

Cosmiomorpha (Microcosmiomorpha) horni BOURGOIN, 1931

(Figs. 11, 12 & 15)

Cosmiomorpha horni BOURGOIN, 1931, Bull. Soc. nat. Luxembourg (n. s.), 41 : 46.

Cosmiomorpha similis: MIKŠIĆ, 1977, l. c.: 356. (nec FAIRMAIRE)

Distribution: Taiwan (Wulai, Lalashan, Fenchihu, Lishan, Howenshan, Meishan-Tinchi, Lukuei, Kenting-Park).

Specimens examined: 64 ♂♂, 30 ♀♀.

Notes. The species was described by BOURGOIN, 1931, based on a female specimen from "Kosempo" (now Chiahhsien) in southern Taiwan. Later, MIKŠIĆ (1977) treated it as a synonym of *C. (M.) similis similis* FAIRMAIRE. The present authors have examined many specimens from various areas of Taiwan, and have concluded that it is not a synonym but a good species.

The species can be distinguished from the *C. (M.) similis similis* FAIRMAIRE by the smaller body, the hairs on the male dorsal surface much finer and longer (in the case of *C. (M.) similis similis*, the hairs on the surface are shorter and bolder), the male protibia wider with two outer teeth (in the case of *C. (M.) similis similis*, it is narrower with an outer tooth), total length of the protibia and the protarsus about 0.5 times length of body (in the case of *C. (M.) similis similis*, it is about 0.6 times length of the body), and the female black and mat (in the case of *C. (M.) similis similis*, it is reddish brown).

The species is broadly distributed in Taiwan, but generally speaking, the individuals occurring in low altitude are light reddish brown, while those in higher altitude become darker in colour.

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国際動物物名委員会からのお願い (6)

The following Opinions were published on 25 March 1988 in Vol. 45, Part 1 of the Bulletin of Zoological Nomenclature.

Opinion No.

- 1472 *Cyclaxyra* BROWN, 1893 (Coleoptera): conserved.
- 1473 *Tetropium* KIRBY, 1837 (Coleoptera): conserved.
- 1474 *Trophophorus* SCHÜNHERR, 1842 (Coleoptera): conserved.
- 1475 *Dexia* MEIGEN, 1826 (Diptera): *Musca rustica* FABRICIUS, 1775 designated as the type species.
- 1476 *Agromyza* MEIGEN, 1826 (Diptera): *Agromyza reptans* FALLÉN, 1823 designated as the type species.
- 1477 *Napomyza* WESTWOOD, 1840 (Diptera): conserved.
- 1478 *Lycaena mirza* PLOTZ, 1880 (currently *Azanus mirza*; Lepidoptera): specific name conserved.
- 1479 *Antispila* HÜBNER, 1825 (Lepidoptera): *Antispila stadtmuellerella* HÜBNER, 1825 designated as the type species.
- 1480 *Apanteles ornigis* WEED, 1887 (currently *Pholetesor ornigis*; Hymenoptera): specific name conserved.

The following applications were published on 25 March 1988 in Vol. 45, Part 1 of the Bulletin of Zoological Nomenclature. Comment or advice on these applications is invited for publication in the Bulletin and should be sent to the Executive Secretary, I. C. Z. N., c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, United Kingdom.

Case No.

- 2607 *Hydrobius* LEACH, 1815 and *Berosus* LEACH, 1817 (Coleoptera): confirmation of type species.
- 2481 *Elachista* TREITSCHKE, 1833 (Lepidoptera): proposed conservation, and confirmation of type species designation.
- 2617 *Colias alfacariensis* RIBBE, 1905 (Lepidoptera): proposed availability as a senior synonym of *Colias australis* VERITY, 1911.
- 2411 *Ludita* NAGY, 1967 (Hymenoptera): proposed designation of *Tiphia villosa* FABRICIUS, 1793 as type species.
- 2608 *Vespa triangulum* FABRICIUS, 1775 (currently *Philanthus triangulum*; Hymenoptera): proposed conservation of the specific name.

国際動物命名委員会からのお願い (7)

The following Opinions were published on June 24, 1988 in Vol. 45, Part 2 of the Bulletin of Zoological Nomenclature.

Opinion No.

- 1489 *Biformalia vittata* SJÖSTEDT, 1920 (currently *Phaulacridium vittatum*; Orthoptera): specific name conserved.
- 1490 *Phisis* STÅL, 1861 and *Teuthras* STÅL, 1874 (Orthoptera) (Grylloptera): *Listros-celis pectinata* GUÉRIN, 1831 confirmed as type species.
- 1491 *Micronecta griseola* HORVÁTH, 1899 (Heteroptera): specific name conserved.
- 1492 *Corixa albifrons* MOTSCHULSKY, 1863 (currently *Micrinecta albifrons*; Heteroptera): neotype designation confirmed.
- 1493 *Geonemus* SCHOENHERR, 1833 (Coleoptera): *Curculio fiabellipes* OLIVIER, 1807 designated as type species.
- 1494 *Leptura marginata* FABRICIUS, 1781 (currently *Acmaeops marginata*; Coleoptera): specific name conserved.
- 1495 *Colydium castaneum* HERBST, 1797 (currently *Tribolium castaneum*; Coleoptera): specific name conserved.
- 1496 *Simulia ferruginea* WAHLBERG, 1844 (currently *Helodon ferrugineus*; Diptera): given precedence over *Simulia rufa* MEIGEN, 1838 and *Simulia borealis* ZETTERSTEDT, 1842.
- 1497 *Opius* WESMAEL, 1835 (Hymenoptera): *Opius pallipes* WESMAEL 1835 designated as type species.

Some Click-beetles from the Nansei Islands

Collected by Mr. T. OGATA

(Coleoptera: Elateridae)

“Notes on Elateridae from Japan and its Adjacent Area (7)”

By TAKASHI KISHII

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Shimokyo-ku, Kyoto 600

In late 1987 and early 1988, I received some interesting materials of elaterid-beetles collected by Mr. TAKESHI OGATA of the Kyūshū University in some islands of the Nansei Islands. This report is the result of my identification of these elaterids, which consist of eight species, of which two species are new subspecific taxa indigenous to some islands, a subspecific taxon is revised to specific status, a species is amended the generic combination and three species are newly recorded from some islands.

My hearty thanks are due to Mr. T. OGATA for his kind offering me an opportunity to study these interest and valuable examples. The holotype specimens of the new taxa described in this paper are deposited in my private collection.

Ampedus (*Ampedus*) *vestitus yakuinsulanus* KISHII, 1983

“Yaku-kebuka-kuro-kometsuki”

(Figs. 1, 9 & 14)

Ampedus (s. str.) *vestitus yakuensis* KISHII, 1979, Ann. Rep. Priv. Schs., Kyoto Pref. 17 : 7, figs. 22 & 56 (Is. Yaku-shima), nec *Ampedus* (s. str.) *yakuensis* KISHII, 1976.

Ampedus (*Ampedus*) *vestitus yakuinsulcnus* KISHII, 1983, Bull. Heian High Sch. Kyoto, 27 : 54, replacement name for *Ampedus* (s. str.) *vestitus yakuensis* KISHII, 1979.

1 ♂, Is. Nakano-shima in Iss. Tokara, Kagoshima Pref., April 29, 1987.

The example from Is. Nakano-shima is new to the fauna, and the specimen is mainly conformable to the population from Is. Yaku-shima.

Ampedus (*Ampedus*) *japonicus kosugiensis* KISHII, 1983

“Yaku-akaashi-kuro-kometsuki”

(Figs. 2, 10 & 15)

Ampedus (Ampedus) japonicus kosugiensis KISHII, 1983, Ent. Rev. Japan, 38 (1) : 33, figs. 7 & 12 (Is. Yaku-shima).

1 ♂, Is. Nakano-shima in Iss. Tokara, Kagoshima Pref., May 1, 1987.

This subspecies of *Ampedus japonicus* indigenous to Is. Yaku-shima is recorded newly from Iss. Tokara, and the present example is generally conformable to the materials from the original habitat.

Melanotus (Melanotus) legatus ogatai subsp. nov.

"Ogata-kushi-kometsuki"

(Figs. 3, 6 & 16)

Melanotus legatus: NAKANE et KISHII, 1955, Bull. Osaka mun. Mus. nat. Hist., 2 : 8 (Nakanoshima).

Melanotus legatus: NAKANE et KISHII, 1958, Sci. Rep. Saikyô Univ. (Nat. Sci. & Liv. Sci.), 2 (5) : 38 (Is. Yaku).

Melanotus legatus: KISHII, 1959, Bull. Heian High Sch. Kyoto, 3 : 17 (Is. Yaku).

Melanotus (Melanotus) legatus: OHIRA, 1967, Bull. Jap. ent. Acad., 3 (5) : 34, figs. 11 & 12 (Iss. Naka-no-shima, Akuseki-jima & Takara-jima in Tokara), part.

Melanotus (Melanotus) legatus: OHIRA, 1968, Kita-Kyûshû no Konchû, 14 (2) : 34 (Is. Kuchi-no-erabu-jima).

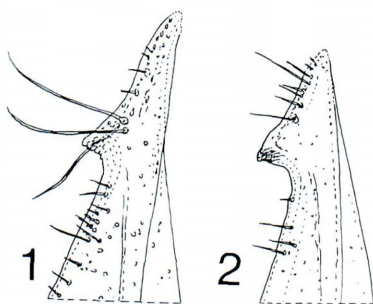
Melanotus (Melanotus) legatus legatus: OHIRA et IRIE, 1977, Kita-Kyûshû no Konchû, 24 (2) : 35 (Is. Naka-no-shima in Tokara).

Melanotus (Melanotus) legatus legatus: KISHII, 1983, Ent. Rev. Japan, 38 (1) : 38 (Is. Yaku-shima).

Melanotus legatus legatus: W. SUZUKI, 1986, Kanagawa-Chûhû, 78 : 22 (Is. Yaku).

Up to date, the examples belonging to *Melanotus legatus* CANDÈZE (1860, Mon. Élat. III, Mém. Soc. r. Sci. Liège, 15 : 323, Japon) reported from Iss. Nakano-shima in Tokaras, Kuchierabu-jima and Yaku-shima, had been regarded as the homogeneous population from main Kyûshû Island, however, as the result of a careful scrutinizing, it may be a new valid subspecific taxon of *legatus* and seems as endemic to Iss. Tokara and Ohsumi. And, it may be distinguishable from subsp. *legatus* by the combination of following structures.

Male, 12.75 × 3.95 mm (holotype) and 12.70 to 15.75 mm (5 paratypes); female, 14.80 to 16.15 mm (4 paratypes). Generally small on an average compared with the nominal subspecific examples from Kyûshû proper. Vertical punctures rather smaller and a little sparser; interstices among punctures visible clearly, not reticulated partly each other. Antennae



Figs. 1, 2. Apical parts of right paramere in male genitalia.

1. *Ampedus (Ampedus) vestitus yakuinsulanus* KISHII, Is. Nakano-shima.

2. *Ampedus (Ampedus) japonicus kosugiensis* KISHII, Is. Nakano-shima.

distinctly shorter in length and feebler in degree of serration of each joint than those of typical subspecies; only one apical joint exceeding apex of pronotal hind angle in male, and hardly attaining to the base in female; relative length and width from 1st to 5th as 26/8, 9/8, 18/10, 28/14 and 27/15 (length/width, holotype) (fig. 3b) respectively, and 30/13, 10/9, 19/11, 27/14 and 26/15 (female) (fig. 3a); basal joint well rounded frontally; 2nd globular, not obconic as typical subspecies; 3rd more or less subclavate, not triangular, and about twice as long as 2nd; 4th not triangular with apico-anterior angle distinctly rounded, but in Yakushima's population rather elongate triangular with apical anterior corner angled. Pronotal punctures relatively smaller, sparser and more circular. Interstrial space on elytra more or less minutely and sparsely punctulated. Prosternal punctures clearly small and sparse, space among punctures plainly wider than each puncture diameter averagely, instead of conspicuously narrow space in typical subspecies. Scutellum (fig. 3e) widest at anterior angles, a little narrowed behind anterior angles, not parallel-sided with posterior end rather rounded. Apico-lateral expansion of each paramere in male genitalia narrow, sharply pointed apically, and with the base simply emarginated roundly (figs. 3f & 16b.) Thorny con-

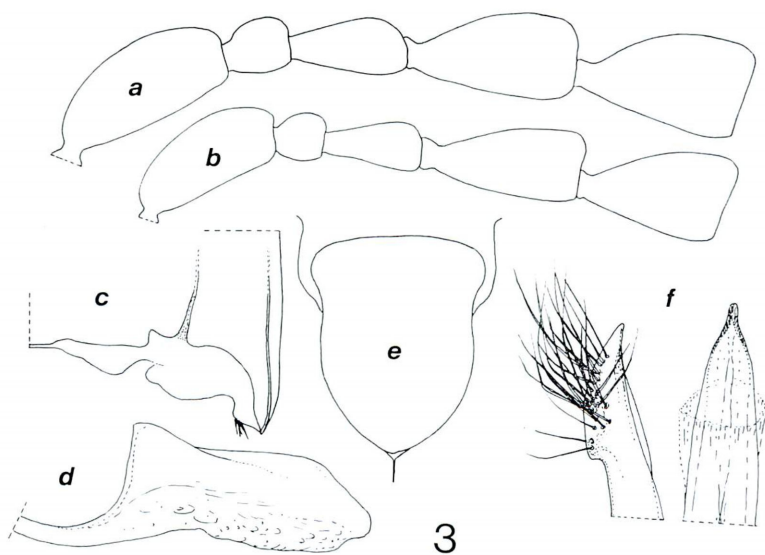


Fig. 3. *Melanotus (Melanotus) legatus ogatai* subsp. nov.

a. female antenna from basal joint to 5th; b. male antenna from basal joint to 5th; c. hind angle of pronotum; d. prosternal process in profile; e. scutellum; f. apical parts of paramere and median lobe in male genitalia.

struction of female bursa copulatrix as figured (fig. 16a).

Holotype, ♂, Is. Nakano-shima in Iss. Tokara, Kagoshima Pref., April 29, 1987, T. OGATA leg.; an isotype, ♀, ditto. Paratypes, 1 ♂, ditto, June 3 to 13, 1953, H. KÔNO leg.; 1 ♀, Is. Kuchierabu-jima, ditto, July 25, 1963, H. KONISHI leg.; 1 ♂, Kuromi in Is. Yaku-shima, ditto, Aug. 3, 1972, O. TAMURA leg.; 1 ♂, Ambô, ditto, July 23, 1972, O. TAMURA leg.; 1 ♂, Mt. Miyanoura-dake, ditto, May 19, 1987, T. OGATA leg.; 1 ♀, Nagata, ditto, May 1, 1984, K. MIZUNO leg.; 1 ♂, Ambô, ditto, May 2, 1984, K. MIZUNO leg.; 1 ♀, Onoaida, ditto, May 3, 1984, K. MIZUNO leg.

Generally, the materials from Is. Yaku-shima are more or less larger than those from Is. Nakano-shima. New name is dedicated to Mr. TAKESHI OGATA, who has been sending me continuously the valuable elaterids including the examples of this time.

Melanotus (Melanotus) legatus erabu subsp. nov.

"Erabu-kushi-kometsuki"

(Figs. 4, 7 & 17)

Melanotus (Melanotus) legatus takahashii KISHII, 1974: KISHII, 1983, Ent. Rev. Japan, 38 (1): 39 (Is. Okierabu-jima), part.

In general, the body scale and coloration, the materials from Is. Okierabu-jima of *Melanotus legatus* are closely allied to those of Is. Yaku-shima, which are described newly above as *Melanotus legatus ogatai*.

Although it may be divided by the following structures from other subspecific members of *legatus*.

Male, length 13.4 to 15.2 mm and width 3.9 to 4.4 mm. Vertical punctures plainly ocellated, relatively larger, denser and more irregular in density and scale in general compared with those of the population from Is. Nakano-shima and Is. Yaku-shima, and also ill-ocellated, a little smaller and sparser than those of the typical subspecies from main islands of Kyûshû and Honshû. Vertical breadth across eyes conspicuously narrow, namely relative breadth between eyes and each eye width in upper views as 65:32 (in subsp. *ogatai* 64:26; subsp. *legatus* 86:32). Antennae similar to those of subsp. *ogatai* in general shape of each joint, but the ratio of each joint in length and width distinguishable from the latter as follows: relative lengths and widths from 1st to 5th as 32/14, 11/10, 17/10, 31/14 and 31/15 (length/width, holotype) (fig. 4a) respectively; 2nd joint ill-quadrate or subglobular; 3rd ill-triangular, not clavate, nearly 1.5 times as long as 2nd (*ogatai*: ca. twice); anterior border of 4th to 11th with dense short and rather recumbent pubescence in male, but always long and erect in subsp. *ogatai* and *legatus* in male (in female usually recumbent in all the subspecies). Pronotal punctures of medio-anterior surface distinctly large ocellate dense and partly reticulated mutually, somewhat uneven in scale and density, and space among punc-

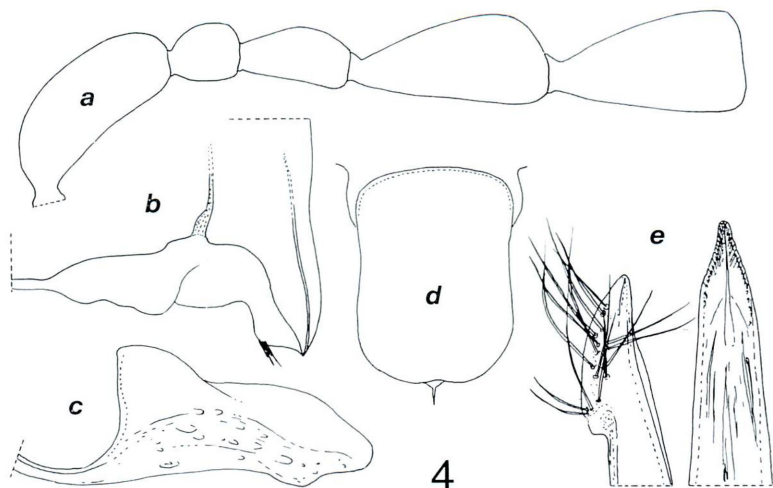


Fig. 4. *Melanotus (Melanotus) legatus erabu* subsp. nov.

a. male antenna from basal joint to 5th; b. hind angle of pronotum; c. prosternal process in profile; d. scutellum; e. apical parts of paramere and median lobe in male genitalia.

tures obviously narrower than puncture diameter averagely, in *ogatai* and nominal subspecies plainly smaller, ill-ocellated, a little sparser, not reticulated perfectly and rather even, and space among punctures distinctly wider than puncture diameter. Contrariwise the punctures on rear slope of pronotum obviously minute, single and sparse. Basal furrows distinct with a small emargination at each inner edge on pronotal hind margin, which is the most obscure compared with all the subspecific taxa of *legatus* (figs. 3c & 4b). Scutellum (fig. 4d) rather oblong-quadrate, rather parallel-sided with a feeble constriction near middle; posterior edge rather transverse having a scant emargination at middle. Male genitalia as figured (figs. 4e & 17).

Holotype, ♂, Is. Okierabu-jima, Kagoshima Pref., May 6, 1982, T. OGATA leg.; iso-types, 2 ♂♂, ditto. Paratypes, 2 ♂♂, ditto, May 4, 1982, T. OGATA leg.

Melanotus (Melanotus) takahashii KISHII, 1974, stat. nov.

"Takahashi-kushi-kometsuki"

(Figs. 5, 8 & 18)

Melanotus (s. str.) *legatus takahashii* KISHII, 1974, Bull. Heian High Sch. Kyoto, 18: 12, figs. 32, 45, 51 & 54 (Is. Amami-ohshima & Is. Okinawa-hontō).

Melanotus (Melanotus) legatus takahashii: BABA et KISHII, 1982, Trans. Essa ent. Soc., 53 : 48, fig. 25 (Is. Amami-ohshima).

Melanotus (Melanotus) legatus takahashii: KISHII, 1983, Ent. Rev. Japan, 38(1) : 39 (Is. Okinoerabu-jima & Is. Amami-ohshima), part.

Melanotus (Melanotus) legatus takahashii: OHIRA, 1984, Kita-Kyûshû no Konchû, 31 (1) : 22 & 23 (Is. Okinawa-hontô).

Melanotus legatus takahashii: KUROSAWA et al., 1985, Color. Ill. Col. Jap. III : 87.

As a result of careful judging from the structures, the examples from Is. Okinawa-hontô and Is. Amami-ohshima, which had been determined as a peculiar subspecies of *Melanotus legatus* CANDÈZE as cited above, is undoubtedly a distinct species. In 1974, I noticed only some differences between the nominal subspecies of *Melanotus legatus* as the original description for this taxon. Therefore, I redescribe here for the peculiar specific structures of *takahashii*.

Male, length 13.65 to 16.70 mm, width 3.9 to 4.9 mm; female, length 15.70 to 16.65 mm, width 4.9 to 5.3 mm. Rather fusiform, robust, not so cylindrical, weakly depressed above, and not parallel-sided, namely widest at apices across pronotal hind angles, then converging roundly forwards as well as gradually rearwards. Wholly dusky brownish black with antennae, legs, posterior margin of abdominal segment and apical one wholly reddish brown. Pubescence dense, semierect, long and yellowish brown with distinct lustre. A little shining.

Head not so broad, rather flattened generally and weakly convex above transversely between eyes; relative breadth of each eye and vertical width across eyes in upper aspect as 44 : 79 (male, 1.8 times) and 38 : 92 (female, 2.4 times); anterior margin of frons well-definedly carinated roundly ahead; frontal groove distinct, broad, a little excavated transversely with some large irregular and rough punctures; vertical punctures large, ocellated, rather dense and uneven in density and size, and space among punctures a little narrower than each puncture diameter averagely in male, or distinctly dense, large and partly reticulated mutually in female.

Antennae elongate, exceeding apices of pronotal hind angles by apical one or two segments in male, or subequal in female; relative joint lengths and widths from basal joint to 5th as 38/19, 15/12, 20/15, 41/20 and 38/21 (length/width, holotype) (fig. 5a), and 35/16, 12/10, 22/12.5, 32/19 and 30/19 (female) (fig. 5b) respectively; basal joint cylindrical, not so robust, a little rounded at anterior border; 2nd rather globular, widest behind antero-outer angle; 3rd rather triangular; 4th to 10th moderately serrated; 4th to 11th with long some hairs and short dense pubescence, and the latter erect obviously in male, but recumbent in female.

Pronotum broad, simply and weakly convex above without medio-longitudinal furrow nor line, but hardly depressed on hind slope only;

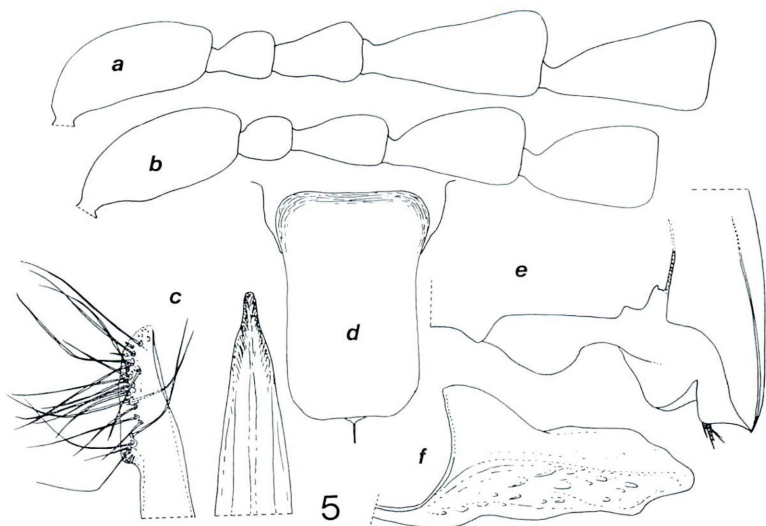


Fig. 5. *Melanothus (Melanotus) takahashii* KISHII, stat. nov.

- a. male antenna from basal joint to 5th; b. female antenna from basal joint to 5th; c. apical parts of paramere and median lobe in male genitalia; d. scutellum; e. hind angle of pronotum; f. prosternal process in profile.

subparallel-sided at posterior half, gradually and roundly converging forwards before middle; relative length and width medianly as 83 : 100; hind angle (fig. 5e) well-developed backwards, scarcely divergent outwards having apex elongate and rather acutely pointed, with an acute carination along side parallelly from apex behind middle; basal furrow very broad, elongate triangular, shallow and a little divergent outwards at anterior ends, having a distinct small emargination on inner angle of posterior margin; basal slope gently declivous back. Discal punctures rather single, large, well dense and longitudinally oblong in shape, generally uneven in scale, density and form, and smaller and a little sparser than those on vertex, gently and progressively becoming larger and denser laterally, and smaller and sparser posteriorly, perfectly ocellate on marginal area and partly reticulated each other; interpunctate space smooth, but in a paratype from Is. Kuchierabu-jima with fine delicate shagreen-like rugosities on whole surface under high magnification.

Scutellum (fig. 5d) elongate, rather rectangle-shaped, clearly declivous ahead, a little depressed medianly; sides slightly narrowed before middle, weakly diverging outwards at anterior angles, and roundly expanded at posterior angles; relative median length and width as 45 : 31;

anterior margin well-definedly carinated and elevated upwards, with many small transverse creases on inner surface along edge; posterior margin not pointed medianly, but rather transverse, sometimes having a feeble emargination at middle; surface punctures minute, sparse and simple.

Elytra widest behind humeri, which are distinctly carinated and slightly protruded outwards, then gently and substraightly narrowing posteriorly; striae fine, with small deep discontinuous and a little elongate punctures, having no narrow groove connecting punctures; intervals among striae rather flattened generally, though at base a little elevated longitudinally; surface punctures small, rather dense and even; space among punctures smooth; sutures simple and moderate; apices also moderately and roundly ended, with sutural ends somewhat weakly protruded.

Prosternal punctures large, rather dense and umbilicated except for medio-longitudinal area and anterior rim with small sparse and single punctures, though generally uneven in density and scale; interpunctate space smooth, but under high magnification sculptured with fine shagreen-like rugosities partly. Prosternal process in profile (fig. 5f) bent inwards behind procoxal cavities, then substraightly extending posteriorly, with a shallow furrow on each side from base to under part of hind apex; hind end blunt and rather rounded having a distinct excavation on under slope. Prosterno-pleural sutures broad, conspicuously double, straight, glabrous and clearly furrowed at anterior ends, and a little divergent anteriorly each other. Propleural punctures single, obviously elongate longitudinally, rather dense and small; interstices among punctures fairly microscopically sculptured by shagreen-like creases. Metasternal punctures somewhat allied to those of propleura in form, but larger and denser relatively. Legs moderate; tarsal pubescence and hairs moderate. Male genitalia as figured (figs. 5c & 18), with apico-lateral expansion of paramere broad, not triangular, and median lobe narrow.

Holotype, ♂, Hatsuno in Is. Amami-ohshima, Kagoshima Pref., April 12, 1973, O. TAMURA leg. Paratypes: 1 ♀, Ikari in ditto, July 2, 1961, T. SHIBATA leg.; 1 ♀, Naze, ditto, April 19, 1964, K. SAKO leg.; 3 ♂♂, Yona to Hijigawa in Is. Okinawa-hontō, Okinawa Pref., April 8, 1973, I. MATOBA, T. TAKAHASHI & O. TAMURA leg.

Materials examined: 1 ♂, Mukaéhama in Is. Kuchierabu-jima, Kagoshima Pref., July 17, 1987, S. YAMAYA leg.; 1 ♂, Mt. Yuwan-dake in Is. Amami-ohshima, Kagoshima Pref., Aug. 9-11, 1977, A. SEINO leg.; 1 ♀, Hatsuno, ditto, May 9, 1987, T. OGATA leg.; 2 ♂♂, Mt. Nago-dake in Is. Okinawa-hontō, Okinawa Pref., May 3, 1985, S. YAMAYA leg.; 1 ♂, Is. Zamami-jima near Is. Okinawa-hontō, ditto, May 8, 1987, N. NAKABAYASHI leg.

Distr.: Is. Kuchierabu-jima, Is. Amami-ohshima, Is. Okinawa-hontō and Is. Zamami-jima.

In many structures, this species resembles *M. legatus*, though the former may be

distinguishable from the latter by the following points.

1. Body broad, large and stout compared with the subspecies of *legatus* from the Nansei Islands.
2. Vertical punctures distinctly dense, large and uneven in density and scale. In *legatus*, *ogatai* and *erabu*, the vertical punctures more or less sparser, smaller and evenner than those of *takahashii*, but somewhat similar to those of *legatus legatus*.
3. Pronotal punctures conspicuously large and dense in general, particularly on posterior slope.
4. Posterior margin of scutellum more or less transverse, hardly rounded or sometimes feebly emarginated.
5. Apex of paramere in male genitalia relatively broad, and median lobe rather clearly narrowing from behind middle to apex (fig. 5c).

Pronegastrius (Chibistrius) amamiensis (ARIMOTO, 1987), comb. nov.

"Amami-chibi-mizugiwa-kometsuki"

(Fig. 11)

Yamatostris amamiensis ARIMOTO, 1987, Ent. Rev. Japan, 42 (2) : 133-135, figs. 1-3 (Amami-Ōshima).

8 exs., Kawauchi, Uken in Is. Amami-ohshima, May 4, 1987.

In 1987, Mr. H. ARIMOTO described newly this minute negastrid-click as a valid *Yamatostris*-species, however, according to my study, it is undoubtedly a *Pronegastris* (*Chibistrius*)-species. The genera *Yamatostris* KISHII, 1976 (type-species: *Cryptohypnus albipilis* CANDÈZE, 1873) and *Pronegastris* OHIRA, 1963 (type-species: *Cryptohypnus humeralis* CANDÈZE, 1873) are very closely allied each other in general outline, but they may be distinguishable in many structures as follows:

Pronegastris OHIRA, 1963

Anterior margin of pronotum not produced ahead over anterior angles.

Carina on pronotal hind angle fine and a little divergently extending ahead from side.

Posterior edge of pronotal hind angle simple.

Pronotal granules small, clothed with only on anterior border and median part.

Elytral punctures of interstitial surface single, minute, rather dense and even.

Prosternum punctured, sometimes with granules on anterior area only.

Propleural hind edge moderately emarginated.

The 4th tarsal joint simple.

Male genitalia with median and lateral lobes having short basal parts.

Yamatostris KISHII, 1976

Anterior margin of pronotum clearly protruded ahead over anterior angles.

Carina on pronotal hind angle distinct and plainly divergently extending ahead from side.

Posterior edge of pronotal hind angle with a small distinct projection.

Pronotal granules large, clothed on all surface.

Elytral punctures of interstitial surface large, coarse and uneven.

Prosternum granulated medianly and anteriorly.

Propleural hind edge widely and deeply emarginated with a plain emargination at inner base.

The 4th tarsal joint a little dilated apically.

Male genitalia with median and lateral lobes having elongate basal parts.

In some points, *amamiensis* have an intermediate characteristics of both the genera, namely the prosternum having some granules on anterior part, and propleural hind edge emarginated moderately with a small emargination at inner base, yet it is sure undoubtedly that belongs under the genus *Pronegastrius* in many structures. And, in the simple propleural structures it joins the member of the subgenus *Chibi-strius*.

Quasimus (Quasimus) shibatai shibatai KISHII, 1970

"Shibata-chibi-mame-kometsuki"

(Fig. 13)

Quasimus (Quasimus) shibatai KISHII, 1970, Bull. Heian High Sch. Kyoto, 15 : 19, figs. 43 & 44 (Is. Yaku-shima).

Quasimus (Quasimus) shibatai shibatai: KISHII, 1983, Ent. Rev. Japan, 38 (1) : 40, fig. 28 (Is. Yaku-shima).

2 exs., Is. Nakano-shima in Iss. Tokara, Kagoshima Pref., July 19, 1986; 10 exs., ditto, May 1, 1987.

This is new to the fauna of Is. Nakano-shima, and the structures are almost conformable to those of the population from Is. Yaku-shima.

Yukoana elongata elongata KISHII, 1970

"Naga-mame-kometsuki"

(Fig. 12)

Yukoana elongata KISHII, 1970, Bull. Heian High Sch. Kyoto, 15 : 6, figs. 9 & 10 (Is. Yaku-shima).

Yukoana elongata elongata: OHIRA, 1974, Kita-Kyûshû no Konchû, 19 (3) : 62 (Is. Naka-no-shima).

1 ♂, Is. Nakano-shima in Iss. Tokara, Kagoshima Pref., May 1, 1987.

Pronotal punctures of this example from Is. Nakano-shima are a little denser than those of the population from Is. Yaku-shima.

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- OHIRA, H., 1963. Notes on some elaterid-beetles from Japan (Coleoptera) (I). Kontyū, 31 (4) : 270-275, 1 pl.
- 1974. Notes on some rare Elateridae from Kyūshū (12). Kita-Kyūshū no Konchū, 19 (3) : 61-64, 3 figs.

Explanation of plates 9-10.

Plate 9, figs. 6 to 13.

- Fig. 6. *Melanotus (Melanotus) legatus ogatai* subsp. nov.
 a. holotype, ♂, Is. Nakano-shima, 29-IV, 1987, 12.75 mm.
 b. isotype, ♀, ditto, 14.5 mm.
 c. paratype, ♀, Is. Kuchierabu-jima, 25-VII, 1983, 14.8 mm.
 d. paratype, ♂, Is. Yaku-shima, 19-V, 1987, 15.75 mm.
- Fig. 7. *Melanotus (Melanotus) legatus erabu* subsp. nov.
 holotype, ♂, Is. Okierabu-jima, 6-V, 1982, 13.7 mm.
- Fig. 8. *Melanotus (Melanotus) takahashii* KISHII, stat. nov.
 a. holotype, ♂, Is. Amami-ohshima, 12-IV, 1973, 16.7 mm.
 b. paratype, ♀, ditto, 2-VII, 1961, 16.5 mm.
 c. ♂, Is. Okinawa-hontō, 3-V, 1985, 16.5 mm.
- Fig. 9. *Ampedus (Ampedus) vestitus yakuinsulanus* KISHII
 ♂, Is. Nakano-shima, 29-IV, 1987, 13.1 mm.
- Fig. 10. *Ampedus (Ampedus) japonicus kosugiensis* KISHII
 ♂, Is. Nakano-shima, 1-V, 1987, 7.8 mm.
- Fig. 11. *Pronegastrius (Chibistrius) amamiensis* (ARIMOTO), comb. nov.
 ♂, Is. Amami-ohshima, 4-V, 1987, 2.5 mm.
- Fig. 12. *Yukoana elongata elongata* KISHII
 ♂, Is. Nakano-shima, 1-V, 1987, 2.9 mm.
- Fig. 13. *Quasimus (Quasimus) shibatai shibatai* KISHII
 ♂, Is. Nakano-shima, 1-V, 1987, 2.05 mm.

Plate 10, figs. 14 to 18, genitalia.

Fig. 14. *Ampedus* (*Ampedus*) *vestitus yakuinsulanus* KISHII

♂, Is. Nakano-shima, 29-IV, 1987 (4933).

Fig. 15. *Ampedus* (*Ampedus*) *japonicus kosugiensis* KISHII

♂, Is. Nakano-shima, 1-V, 1987 (4936).

Fig. 16. *Melanotus* (*Melanotus*) *legatus ogatai* subsp. nov.

a. isotype, ♀, thorny construction on bursa copulatrix, Is. Nakano-shima, 29-IV, 1987 (4935).

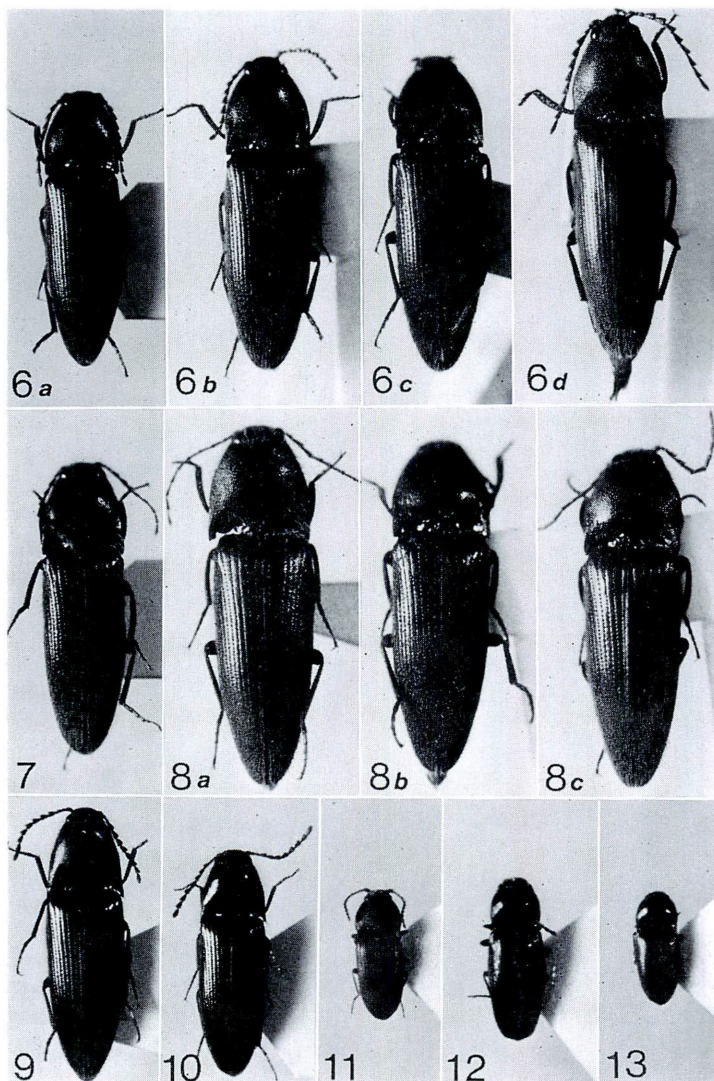
b. holotype, ♂, ditto (4934).

Fig. 17. *Melanotus* (*Melanotus*) *legatus erabu* subsp. nov.

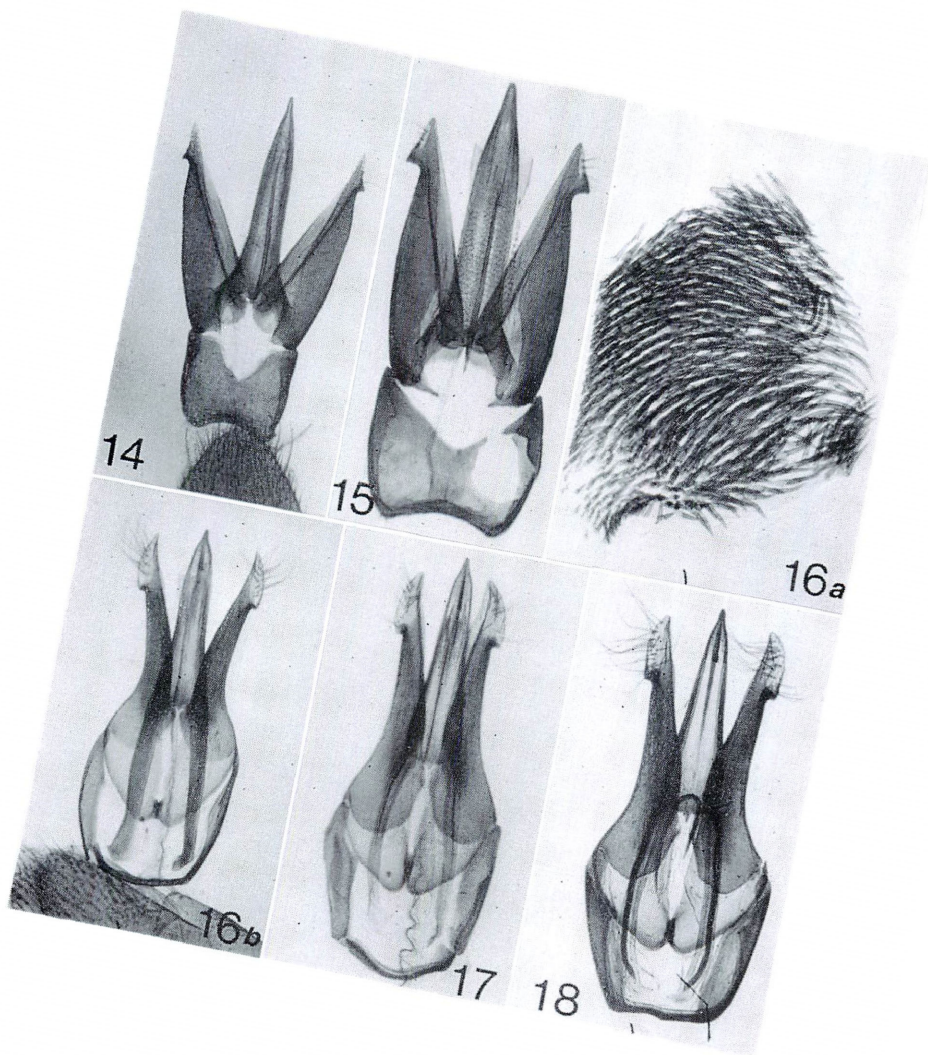
paratype, ♂, Is. Okierabu-jima, 4-V, 1982 (4234).

Fig. 18. *Melanotus* (*Melanotus*) *takahashii* KISHII, stat. nov.

paratype, ♂, Is. Okinawa-hontô, 6-IV, 1973 (2522).







Coprophagid-beetles from Northwest Thailand (II)

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Abstract This is the second part of a series of papers dealing with a research on coprophagid-beetles from Northwest Thailand. Three new species of the family Scarabaeidae, *Sisyphus* (s. str.) *maniti*, *Onthophagus* (s. str.) *ochii*, and *Aphodius* (*Acrossus*) *tiabi* are described. A list of the species of the genus *Onthophagus* (I) and an additional list are also given.

Description

Sisyphus (s. str.) *maniti* sp. nov.

(Figs. 1 & 5)

Dark yellowish brown with funicles of antennae and mouth parts paler in colour, antero-lateral portions of pronotum, humeral portions of elytra, etc. more or less reddish; opaque except dorsal surfaces of prothorax and mesofemora, which are moderately shining; fairly noticeably clothed above with pale brownish, erect setae. Oval, highly convex though softly flattened above; gently constricted between pronotum and elytra.

Male: Head dilated forwards, fairly closely punctate, punctures shallow and often annular; clypeus armed with two fairly widely separated teeth, which are finger-like and divided by weakly bisinuous excision, and also with outer teeth, which are shorter but triangularly pointed.

Pronotum 1.7 times as wide as long, rather closely punctate, punctures shallow and often annular, a little larger than cephalic ones; sides steeply declined to lateral margins, which are triangularly produced laterad in apical half, gently divergent towards base and very feebly bisinuous in remaining portions; front angles acute; hind angles obtuse; disc with a shallow median impression in posterior $\frac{1}{3}$, also with shallow oblique impression at basal $\frac{1}{3}$ on each side.

Elytra slightly longer than wide, shallowly punctate-striate, striae distinctly bold, stria punctures large and transverse, rather closely set

with each other; intervals nearly flat and microshagreened, bearing rows of setae along striae.

Pygidium rather parabolic, microshagreened, shallowly punctate and setigerous.

Metasternum feebly microshagreened, rather closely punctate, punctures rather large and often annular, depressed posteriorly, with transverse low ridge along border of mesosternum.

Legs fairly long; protibia armed with 3 sharp outer teeth; metafemur with sharp tooth at apical $\frac{2}{5}$ of its posterior margin, whose apex is somewhat hooked and directed towards base.

Female: Metafemur with blunt angulation at the middle of posterior margin, but is not toothed.

Body length: 2.8–3.2 mm.

Holotype: ♂, Doi Pui, Chiang Mai, Northwest Thailand, 22. III. 1988, K. MASUMOTO leg. (in NSMT). Paratypes: 4 exs., same data as the holotype; 1 ex., Doi Pui, 2. II. 1988, MANIT Y. leg.

Notes. This new species can be distinguished from allied species from the Oriental region by the small body (the smallest among all the Oriental species), the surface covered with rather large, shallow and annular punctures, the elytral striae bold and shallow with the punctures large and transverse, and the male metafemora acutely hooked at apical $\frac{1}{3}$ of posterior margin.

This new species is dedicated to Mr. MANIT YIMYAM, Toongnoi School in Phrao District, Chiang Mai Province, who has been constantly assisting my present project in Northwest Thailand.

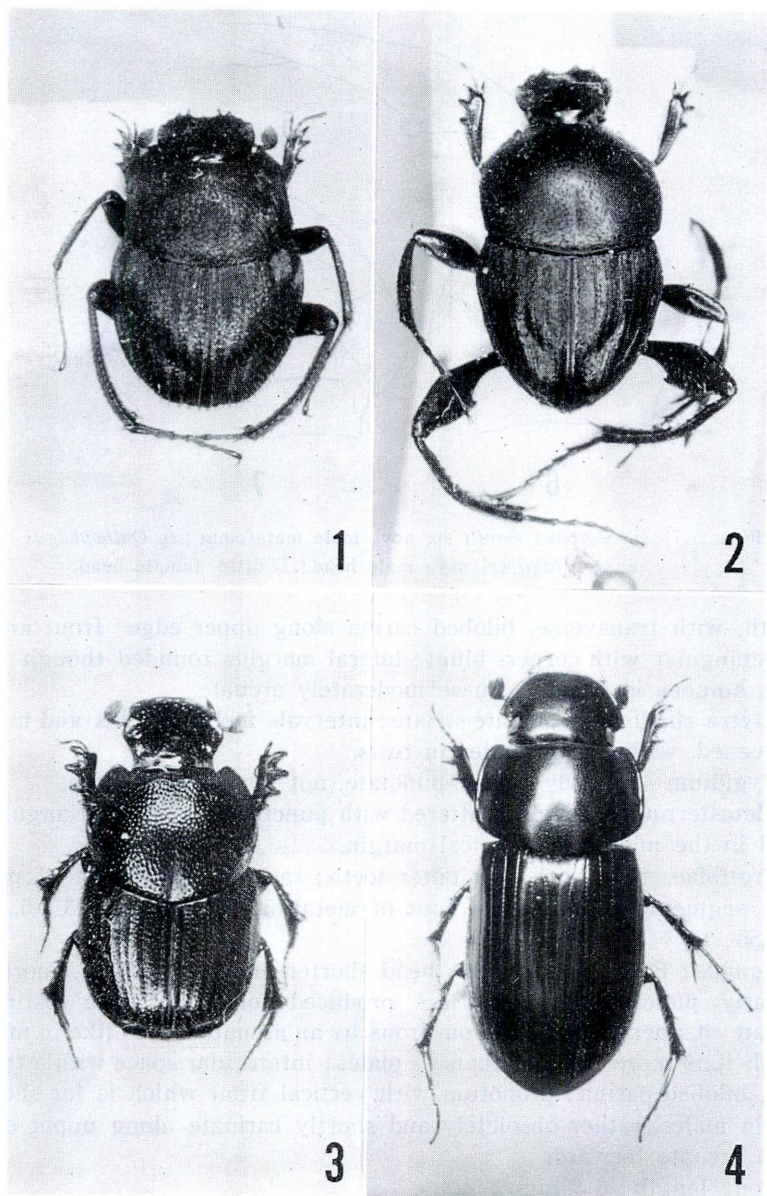
Onthophagus (s. str.) *ochii* sp. nov.

(Figs. 3, 6 & 7)

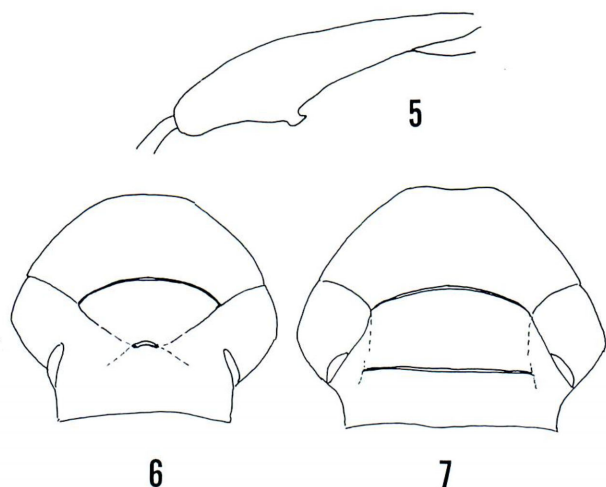
Piceous, often bears obscurely coppery tinge, with tibiae and tarsi more or less lighter in colour, antennae, mouth parts yellowish brown; head weakly shining, pronotum and elytra more weakly shining, ventral surface moderately so; body rather noticeably clothed with pale setae. Oblong oval, rather strongly convex though gently flattened posteriorly.

Male: Head rather semicircular in anterior half, constricted near base, gently convex above; clypeus sparsely scattered with strong punctures, with outer margin rounded and feebly reflexed, briefly truncate at apex, separated from frons by arcuate carina; frons somewhat elliptic and shining, scattered with punctures, which are sparse and a little smaller than clypeal ones; interocular space armed with an upright horn, of which the foot is dilated and the summit is briefly arcuate forwards.

Pronotum closely, rather shallowly punctate, punctures become shallower and confluent with one another in posterior portion, with a longitudinal median groove in posterior half; front margin vertical and fairly



Figs. 1-4. 1. *Sisyphus maniti* sp. nov., ♂, holotype; 2. *Sisyphus neglectus* GORY, ♂, from Haldwani Distr., Kumaon, India (British Museum (Nat. Hist.), London, ARROW det.); 3. *Onthophagus* (s str.) *ochii* sp. nov., ♂, holotype; 4. *Aphodius* (*Acrossus*) *tiabi* sp. nov., ♂, holotype.



Figs. 5-7. 5. *Sisyphus maniti* sp. nov., male metafemur; 6. *Onthophagus* (s. str.) *ochii* sp. nov., male head; 7. ditto, female head.

smooth, with transverse, bilobed carina along upper edge; front angles subrectangular with corners blunt; lateral margins rounded though very feebly sinuous in basal $\frac{2}{5}$; base moderately arcuate.

Elytra shallowly punctate-striate; intervals feebly convex and microshagreened, with fine granules in rows.

Pygidium shallowly rugoso-punctate, not margined at base.

Metasternum sparsely scattered with punctures, weakly, triangularly raised in the middle near apical margin.

Protibiae stout, with four outer teeth; ratio of the length of metatarsal segments and terminal spur of metatibia as follows: 1.3, 0.5, 0.27, 0.3, 0.55; 1.0.

Female: Body less convex; head shorter and less shining, more irregularly punctate; clypeus less produced forwards, more distinctly truncate at apex, separated from frons by an arcuate carina like in males, though it is more distinct than in males; interocular space with a transverse, bilobed carina; pronotum with vertical front which is far shorter than in males, rather obsoletely and shortly carinate along upper edge, carina arcuate forwards.

Body length: 6-8 mm.

Holotype: ♂, Meo Vil., Doi Suthep, Chiang Mai, Northwest Thailand, 2. V. 1985, K. MASUMOTO leg. (in NSMT). Paratypes: 14 exs., same data as the holotype; 1 ex., Doi Pui/Doi Suthep, Chiang Mai, 26. VII. - 1. VIII. 1987, K. MASUMOTO leg.

Notes. This new species somewhat resembles *Onthophagus* (s. str.) *furcillifer*

BATES, 1891 from Kashmir and India. The new one is, in males, easily distinguished from the latter by the differently shaped horn between the eyes and also frontal carina of the pronotum. In females, it can be discriminated from the nominated species by the differently shaped cephalic posterior carina and also pronotal carina.

This species is named after Mr. TERUO OCHI, who is one of my best colleagues and has given me invaluable advice.

Aphodius (Acrossus) tiabi sp. nov.

(Fig. 4)

Blackish brown, with anterior portion of head, lateral portions of pronotum, antennae, mouth parts and legs lighter in colour; fore body above strongly shining; elytra moderately shining though posterior half of it rather weakly so, with lateral portions and posterior $\frac{1}{3}$ finely haired. Oblong oval and moderately convex above.

Head somewhat semicircular, gently convex above, rather closely, finely punctate, finely rimmed along outer margin, very feebly truncate at apex, with frontal suture very fine; genae rather large and subrectangular.

Pronotum transverse, moderately convex with a shallow medial impression in posterior half, rather closely and finely punctate, punctures a little sparser than cephalic ones; sides gently narrowed towards apex, clearly rimmed; front and hind angles obtuse; base obtusely produced. Scutellum triangular with base a little shorter than sides, sparsely scattered with small punctures near base.

Elytra finely punctate-striate, punctures in striae set 2-3 times their own diameter apart with each other; intervals wide, feebly convex above, scattered with microscopic punctures; humeri dentate.

Protibia with three sharp outer teeth; ratio of the length of metatarsal segments and also of upper terminal spur of metatibia as follows: 11.0, 3.5, 3.0, 2.5, 5.0; 10.0.

Body length: ca. 9.5 mm.

Holotype: ♂, Doi Inthanon (2,500 m alt.), Chiang Mai, 24. III. 1988, K. MASUMOTO leg. (in NSMT). Paratypes: 2 exs., same data as the holotype; 8 exs., 15. IX. 1988, same locality and collector.

Notes. This new species is very peculiar in having the elytra armed with the humeral teeth and clothed with fine hairs in lateral and posterior portions. The nearest known species may be *Aphodius (Acrossus) superatratatus* NOMURA et NAKANE, 1951 from Japan. The new species can be distinguished from the known by the pronotum only finely and evenly punctate, and the elytra less strongly punctate with the lateral and posterior portions more distinctly haired.

This new species is dedicated to Mr. TIAB TANOCHIT, principal of Toongnoi School, who gives me kind consideration in undertaking my field survey.

List of Coprophagid-beetles from Northwest Thailand (II)

Subfamily **Scarabaeinae**Tribe **Onthophagini** (I)

Onthophagus (*Proagoderus*) *mouhoti* HAROLD, 1875

Onthophagus mouhoti HAROLD, 1875, Coleopt. Hefte, 13 : 88.

Localities in Northwest Thailand : Maesa Vil., Phrao District¹⁾.

Distribution : Thailand ; Laos.

Onthophagus (*Matashia*) *avocetta* ARROW, 1933

Onthophagus avocetta ARROW, 1933, Ann. Mag. nat. Hist., (10) 12 : 421.

Localities in Northwest Thailand : Doi Pui/Doi Suthep, Maesa Vil.

Distribution : Assam ; Burma ; Thailand ; Malay Peninsula ; Java ; Borneo.

Onthophagus (*Matashia*) *bonasus* (FABRICIUS, 1775)

Scarabaeus bonasus FABRICIUS, 1775, Syst. Ent. : 23.

Localities in Northwest Thailand : Maesa Vil., Phrao District, Chom Thong.

Distribution : South Afghanistan to Thailand.

Onthophagus (*Matashia*) *manipurensis* ARROW, 1907

Onthophagus manipurensis ARROW, 1907, Ann. Mag. nat. Hist., (7) 19 : 426.

Localities in Northwest Thailand : Doi Pui, Doi Inthanon.

Distribution : South India ; Assam ; Burma ; Thailand ; Java ; Sumatra.

Onthophagus (*Serrophorus*) *atropolitus* D'ORBIGNY, 1902

Onthophagus atropolitus D'ORBIGNY, 1902, Ann. Soc. ent. Fr., 71 : 148.

Localities in Northwest Thailand : Maesa Vil., Phrao District, Doi Inthanon.

Distribution : 'Fore' India ; Sikkim ; Assam ; Burma ; Thailand.

Onthophagus (*Serrophorus*) *rectecornutus* LANSBERGE, 1883

Onthophagus rectecornutus LANSBERGE, 1883, Notes Leyd. Mus., 5 : 49.

Localities in Northwest Thailand : Maesa Vil., Phrao District, Ban Pong, Ban Maeyan, Chom Thong, Doi Inthanon.

Distribution : India ; Sri Lanka ; Burma ; Thailand ; South China ; Sunda Is.

Onthophagus (*Serrophorus*) *sagittarius* (FABRICIUS, 1775)

Scarabaeus sagittarius FABRICIUS, 1775, Syst. Ent. : 24.

Localities in Northwest Thailand : Phrao District, Ban Pong, Ban Maeyan, Chom Thong.

Distribution : India to South China and Malay Peninsula to Timor.

Onthophagus (*Serrophorus*) *seniculus* (FABRICIUS, 1781)

Scarabaeus seniculus FABRICIUS, 1781, Spec. ins., 1 : 23.

¹⁾ "Phrao" is the same as "Pao" in the preceding list. As the former spelling is likely commoner, I will use it from here on.

Localities in Northwest Thailand: Phrao District.

Distribution: 'Hind' India; Burma; Thailand; South China.

Onthophagus (Paraphanaeomorphus) jeannelianus PAULIAN, 1945

Onthophagus (Onthophagus) jeannelianus PAULIAN, 1945, Coléopt. Scarab. Indoch.: 107.

Localities in Northwest Thailand: Doi Pui/Doi Suthep, Maesa Vil., Mae Taeng, Phrao District.

Distribution: Thailand; South Vietnam.

Onthophagus (Paraphanaeomorphus) phanaeiformis BOUCOMONT, 1914

Onthophagus phanaeiformis BOUCOMONT, 1914, Ann. Mus. civ. Genova, 46: 224.

Localities in Northwest Thailand: Maesa Vil.

Distribution: Burma; Thailand; North Vietnam.

Onthophagus (Parascatonomus) tricornis (WIEDEMANN, 1823)

Copris tricornis WIEDEMANN, 1823, Zool. Mag., 2 (1): 10.

Localities in Northwest Thailand: Doi Pui/Doi Suthep, Maesa Vil., Mae Taeng, Phrao District, Chiang Dao.

Distribution: India to Japan.

Onthophagus (Indachorius) koshunensis BALTHASAR, 1941

Onthophagus koshunensis BALTHASAR, 1941, Arb. morphol. tax. Ent. Berlin-Dahlem, 8: 183.

Localities in Northwest Thailand: Doi Pui/Doi Suthep, Maesa Vil.

Distribution: Thailand; Taiwan.

Onthophagus (Pseudonthophagus) penicillatus HAROLD, 1879

Onthophagus penicillatus HAROLD, 1879, Coleopt. Hefte, 16: 225.

Localities in Northwest Thailand: Maesa Vil.

Distribution: Sikkim to South China and also Sumatra and Borneo.

Additions to the preceding list

SCARABAEIDAE

Subfamily Scarabaeinae

Tribe Sisyphini

Sisyphus (s. str.) *longipes* (OLIVIER, 1789)

Scarabaeus longipes OLIVIER, 1789, Entom., 1 (3): 164.

Localities in Northwest Thailand: Maesa Vil., Mae Taeng, Phrao District.

Distribution: India; Sri Lanka; Burma; Thailand.

Sisyphus (s. str.) *neglectus* GORY, 1833 (Fig. 2)

Sisyphus neglectus GORY, 1833, Mon. *Sisyphus*: 14.

Localities in Northwest Thailand: Maesa Vil., Phrao District, Chiang Dao.

Distribution: India to South China.

Sisyphus (s. str.) *maniti* sp. nov. (Fig. 1)

Tribe **Pinotini**

Phacosoma laetum ARROW, 1931

Phacosoma laetum ARROW, 1931, Fauna Brit. India, Lamel., 3: 356.

Localities in Northwest Thailand: Doi Pui.

Distribution: South India; Thailand.

Tribe **Coprini**

Synopsis simplex SHARP, 1875

Synopsis simplex SHARP, 1875, Coleopt. Hefte, 13: 45.

Localities in Northwest Thailand: Doi Pui.

Distribution: Thailand; Laos.

Synopsis birmanicus GILLET, 1907

Synopsis birmanicus GILLET, 1907, Ann. Mus. civ. Genova: 600.

Localities in Northwest Thailand: Doi Suthep, Maesa Vil., Phrao District.

Distribution: Burma; Thailand.

Heliocopris dominus BATES, 1868

Heliocopris dominus BATES, 1868, Coleopt. Hefte, 4: 88.

Localities in Northwest Thailand: Maesa Vil., Phrao District.

Distribution: Northern Fore India to North Vietnam; Malay Peninsula.

Copris (s. str.) *iris* SHARP, 1875

Copris iris SHARP, 1875, Coleopt. Hefte, 13: 45.

Localities in Northwest Thailand: Maesa Vil.

Distribution: Burma to Vietnam and also Malay Peninsula.

Copris (*Paracopris*) *furciceps* FELSCH, 1910

Copris furciceps FELSCH, 1910, D. ent. Ztschr.: 384.

Localities in Northwest Thailand: Doi Pui/Doi Suthep, Maesa Vil., Phrao District, Ban Pong.

Distribution: Assam; Burma; Thailand; Laos.

Tribe **Onitini**

Onitis feae FELSCH, 1907

Onitis feae FELSCH, 1907, D. ent. Ztschr.: 293.

Localities in Northwest Thailand: Doi Pui.

Distribution: Burma; Thailand; Laos.

Tribe **Oniticellini**

Liatongus (*Paraliatongus*) *rhadamistus* (FABRICIUS, 1775)

Scarabaeus rhadamistus FABRICIUS, 1775, Syst. Ent.: 22.

Localities in Northwest Thailand: Phrao District, Ban Pong, Ban Maeyan, Mae Pang, Doi Inthanon, Chom Thong.

Distribution: India; Sri Lanka; Thailand; Laos.

References

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国際動物命名委員会からのお願い (8)

On 23 September 1988 in Vol. 45, Part 3 of Applications published in the Bulletin of Zoological Nomenclature. Comment or advice should be sent to the Executive Secretary, I. C. Z. N.

Case No.

- 2568 Acrididae KARNY, 1907, Oedipodidae WALKER, 1870 and Locustidae LATREILLE, 1802 (Orthoptera): proposed order of precedence.
- 2618 *Bruchus* LINNAEUS, 1767, *Ptinus* LINNAEUS, 1767 and *Mylabris* FABRICIUS, 1775 (Coleoptera): proposed conservation.
- 2627 *Coryphium angusticollis* STEPHENS, 1834 (Coleoptera): proposed conservation of both the generic and specific names.
- 2632 *Tachina orbata* WIEDEMANN, 1830 (currently *Peribaea orbata*; Diptera): proposed confirmation of neotype designation.
- 2628 *Tenthredo zonula* KLUG, 1817 (Hymenoptera): proposed conservation of the specific name.

The following opinions were published on 23 September 1988 in Vol. 45, Part 3 of the Bulletin of Zoological Nomenclature.

Opinion No.

- 1504 Berytidae FIEBER, (1815) and *Berytinus* KIRKALDY, 1900 (Heteroptera): conserved.
- 1505 *Sigara scholtzi* FIEBER, (1860) (currently *Micronecta (Dichaetonecta) scholtzi*; Heteroptera): specific name conserved.
- 1506 *Oncomera* STEPHENS, 1829 (Coleoptera): *Dryops femorata* FABRICIUS, 1792 designated as the type species.
- 1507 *Musca marginalis* WIEDEMANN, 1830 (currently *Chrysomya marginalis*; Diptera): specific name conserved.
- 1508 *Simulium austeni* EDWARDS, 1915 (Diptera): not to be given precedence over *Simulium posticatum* MEIGEN, 1838.
- 1509 *Paraphytomyza* ENDERLEIN, 1936 (Diptera): *Phytagromyza luteoscutellata* DEMEIJERE, 1924 designated as the type species.
- 1510 *Microgaster* LATREILLE, 1804 (Hymenoptera): *Microgaster australis* THOMSON, 1895 designated as the type species.
- 1511 *Halictus costulatus* KRIECHBAUMER, 1873 (currently *Lasioglossum costulatum*; Hymenoptera): specific name conserved.
- 1515 Laridae RAFINESQUE SCHMALTZ, 1815 (Aves) and Larini LECONTE, 1861 (Coleoptera): homonymy removed.

Check-Liste der Arten von Eumolpinae, Chrysomelinae, Alticinae, Hispinae und Cassidinae in Afghanistan (Coleoptera, Chrysomelidae)

By BLAGOY GRUEV

Universität zu Plovdiv, Bulgarien

Neulich wird die Fauna der Blattkäfer Afghanistans intensiv untersucht. Daraus resultierte, daß es eine Reihe von Veröffentlichungen zur Welt kamen, was die mitgeteilten Angaben zu verallgemeinern erforderlich macht. Die gegenwärtige Arbeit stellt einen Versuch zur Verallgemeinerung der vorliegenden Angaben über ein Teil der Unterfamilien der Familie Chrysomelidae: Eumolpinae, Chrysomelinae, Alticinae, Hispinae und Cassidinae dar. Neben diesen werden darin zwei neue für die Wissenschaft Arten beschrieben und 4 neue Arten für die Fauna Afghanistans, sowie neue Tatsachen über die Verbreitung von 18 Arten im Lande mitgeteilt.

Die Nahrheit der geographischen Begriffe von den Fundorten stehen mit dem "Haack Weltatlas", Gotha, 1985 im Einklang.

Danksagung. Meine größte Dankbarkeit gebührt Prof. Dr. I. K. LOPATIN aus Minsk, einem der wirksamsten Spezialisten in der Chrysomelidae-Forschung Afghanistans für die geleistete vielfältige Hilfe bei der Erstellung der Check-Liste: Bestätigung der einen von den neuen für die Wissenschaft Arten (*Chaetocnema afghana*), kritische Analyse der angebotenen Liste und Bekanntmachung von wertvollen Angaben über einige der veröffentlichten Arten.

Ich danke desweiteren Dr. OTTÓ MERKL aus dem Nationalen Naturwissenschaftlichen Museum in Budapest, Prof. Dr. L. N. MEDVEDEV aus Moskau, Dr. PETAR BERON aus dem Nationalen Naturwissenschaftlichen Museum in Sofia und Dr. MAURO DACCORDI aus dem Naturwissenschaftlichen Museum zu Verona für die mir zur Bestimmung überlassenen Materialien, wie auch Prof. Dr. SHINSAKU KIMOTO aus der Universität in Kurume, der eine der Arten bestimmte, und für die Veröffentlichung der Arbeit in seinem Lande sorgte.

Unterfamilie **Eumolpinae**

Anidania luctuosa (SOLSKY, 1881)

A. luctuosa SOLSKY, 1881: LOPATIN, 1963 (1), 1967 (2); MEDVEDEV, 1983 (3).

Literaturangaben: NO Afghanistan (Robatak, 1,250 m) (1); N Afghanistan (Prov. Herat: Balamurghab, 470 m) (2); Nuristaner Naturalregion (3).

Bedelia insignis LEFÈVRE, 1875

B. insignis LEFÈVRE, 1875: LOPATIN, 1963 (1), 1967 (2); KIMOTO, 1966 (3); MEDVEDEV, 1983 (4), 1985 (5).

Literaturangaben: NO Afghanistan (Badakhshan, Wardudzh-Tal, Tschakaran, 1,850 m; Barak, 1,650 m; Kokcha-Tal, Faizabad, 1,450 m; Nuristan, Baschgul-Tal, Purstam, 1,700 m); O Afghanistan (Umgb. Kabul, 1,740 m) (1); N Afghanistan (Prov. Herat: Balamurghab, 470 m) (2); Barak; Kabul (3); Badakhshaner, Westliche, Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (4); Kabul, 1,800 m; Paghman, NO von Kabul, 2,200 m; Maidan, Tokana; Oruzgan, Shahrstan (5).

Untersuchtes Material: Kabul, Darulaman, 1,820 m, 18. VI. 1974, leg. L. PAPP (det. KIMOTO) (Budapest).

Bedelia kokanica (SOLSKY, 1882)

B. kokanica SOLSKY, 1882: LOPATIN, 1977 (1), 1982 (2).

Literaturangaben: Badakhshan (Schachdara-Fluß bei Chagan) (1); NO Afghanistan (Badakhshan, Wardudzh-Tal, Barak, 1,650 m); O Afghanistan (Nuristan, Kamdesh, Baschgul-Tal, 2,200 m) (2).

Callipta fausti (WEISE, 1882)

C. fausti WEISE, 1882: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Zentrale Naturalregion (1); Herat (NW von Adraskan-Fluß, 1,400 m) (2).

Chrysochares asiaticus orientalis LOPATIN, 1963

C. asiaticus orientalis LOPATIN, 1963: LOPATIN, 1967 (1); MEDVEDEV, 1983 (2).

Literaturangaben: N Afghanistan (Prov. Maimana: Maimana) (1); Nuristaner und Nordwestliche Naturalregionen (2).

Colasposoma ornatum JACOBY, 1881

C. ornatum JACOBY, 1881: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Kabul-Jalalabader Naturalregion (1); Nangarhar, bei Maman-dara (2).

Macrocoma indica BALY, 1878, s. str.

M. indica BALY, 1878: LOPATIN, 1982 (1).

Literaturangaben: O Afghanistan (Nuristan, Baschgul-Tal, 1,200 m) (1).

Untersuchtes Material: Nuristan, Baschgul-Tal, 1,200 m, 20. IV. 1953, leg. J. KLAPPERICH (det. LOPATIN) (Verona).

Macrocoma indica afghana L. MEDVEDEV, 1985

M. indica afghana L. MEDVEDEV, 1983 (nom. nud.): MEDVEDEV (1).

M. indica afghana L. MEDVEDEV, 1985: MEDVEDEV, 1985 (2).

Literaturangaben: Nuristaner Naturalregion (1); Nuristan, Waigal-Fluß, 2,800 m (2).

Macrocoma kabakovi L. MEDVEDEV, 1985

M. kabakovi L. MEDVEDEV in litt.: LOPATIN, 1982 (nom. nud.) (1); MEDVEDEV, 1983 (nom. nud.) (2).

M. kabakovi L. MEDVEDEV, 1985: MEDVEDEV, 1985 (3).

Literaturangaben: O Afghanistan (Nuristan, Baschgul-Tal, 1,100 m) (1); Nuristaner Naturalregion (2); Nuristan, W Chapadara, 1,600 m und Pech, 1,100 m (3).

Macrocoma marquardti (BREIT, 1913)

Ischyromus marquardti BREIT, 1913: REINECK, 1937 (1).

M. marquardti BREIT: MEDVEDEV, 1983 (2), 1985 (3).

Literaturangaben: NO Afghanistan (Gullscheilam; Wama im Pech-Tal) (1); Nuristaner Naturalregion (2); Nuristan (3).

Macrocoma minu'a L. MEDVEDEV, 1985

M. minu'a L. MEDVEDEV, 1983 (nom. nud.): MEDVEDEV, 1983 (1).

M. minuta L. MEDVEDEV, 1985: MEDVEDEV, 1985 (2).

Literaturangaben: Kabul-Jalalabader Naturalregion (1); Kabul, 1,800 m (2).

Malegia hauseri Pic, 1902

M. hauseri PIC, 1902: PIC, 1902 (1); CLAVAREAU, 1914 (2); WINKLER, 1930 (3).

Literaturangaben: "Afghanistan, Kuschke" (1); Afghanistan (2, 3).

Wahrscheinlich handelt es sich um Kushk in NW Afghanistan, und nicht um Kuschka in Turkmenien wie LOPATIN (1963) es behauptet.

Pachnephoptrus weisei REITTER, 1892

P. weisei REITTER, 1892: LOPATIN, 1966 (1), 1982 (2); MEDVEDEV, 1983 (3), 1985 (4).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, Kamdesh, 2,000 m und 1,200 m); O Afghanistan (Panchir-Tal, Bazarak, 2,200 m) (1, 2); Nuristaner und Kabul-Jalalabader Naturalregionen (3); Nuristan, Waigal-Fluß, 2,800 m; Nuristan, Chapadara, 1,400–2,000 m; Kunar, Barikota, 2,000 m; Maidan, Tokana, 2,700 m (4).

Untersuchtes Material: Nuristan, Baschgul-Tal, 1,200 m, 7. V. 1953 und 1,100 m, 6. V. 1953, leg. J. KLAPPERICH (Verona).

Pachnephorus bretinghami BALY, 1878

P. bretinghami BALY, 1878: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Kabul-Jalalabader Naturalregion (1); Nangarhar, bei Maman-dara; Jalalabad, 640 m (2).

Pachnephorus kaszabi LOPATIN, 1962

P. kaszabi LOPATIN, 1962: LOPATIN, 1962 (1), 1963 (2); MEDVEDEV, 1983 (3).

Literaturangaben: S Afghanistan (Kandahar-Kuna, 950 m) (1, 2); Zentrale Naturalregion (3).

Pachnephorus tessella'us (DUFTSCHMIDT, 1825)

P. tessella'us DUFTSCHMIDT, 1825: LOPATIN, 1966 (1), 1967 (2) MEDVEDEV, 1983 (3), 1985 (4).

Literaturangaben: N Afghanistan (Kunduz-Tal, Ischpuschta, 1,100 m) (1); Prov. Herat (Akaza-i, 520 m; Balamurghab, 470 m); O Afghanistan (Prov. Nangarhar: Jalalabad (2); Nordliche, Nordwestliche, Kabul-Jalalabader und Zentrale Naturalregionen (3); Kabul, 1,800 m (4).

Pseudocolaspis sp.

P. sp.: REINECK, 1937 (1).

Literaturangaben: NO Afghanistan (Gullscheilam) (1).

Scelodonta indica DUVIVIER, 1891

S. indica DUVIVIER, 1891: LOPATIN, 1963 (1), 1982 (2); MEDVEDEV, 1983 (3).

Literaturangaben: O Afghanistan (Tangi-Gharuch, 40 km SO Kabul, am Kabul-Fluß, 1,600 m) (1, 2); Kabul-Jalalabader Naturalregion (3).

Untersuchtes Material: Nuristan, Baschgul-Tal, 1,300 m, 21. V. 1953, leg. J. KLAPPERICH (Verona).

Trichotheca kabakovi LOPATIN, 1982

T. kabakovi LOPATIN, 1982 (nom. nud.): LOPATIN, 1982 (1).

Literaturangaben: O Afghanistan (Nuristan, Baschgul-Tal, 1,200 m) (1)

Trichotheca nuristanica L. MEDVEDEV, 1985

T. nuristanica L. MEDVEDEV, 1983 (nom. nud.): MEDVEDEV, 1983 (1).

T. nuristanica L. MEDVEDEV, 1985: MEDVEDEV, 1985 (2).

Literaturangaben: Nuristaner Naturalregion (1); Nuristan, Waigal-Fluß (2).

Unterfamilie **Chrysomelinae***Chrysolina (Chalcoidea) bodemeyeri* (WEISE, 1910)

Chrysomela marginata bodemeyeri WEISE, 1910: LOPATIN, 1963 (1).

Chrysolina marginata bodemeyeri WEISE, 1910: MEDVEDEV, 1983 (2).

Chrysomela bodemeyeri WEISE, 1910: BERTI & RAPILLY, 1973 (3).

Literaturangaben: NO Afghanistan (Hindukush, Khinjan-Tal, Do-Schak, 2,500 m) (1); Badakhshaner, Westliche, Kabul-Jalalabader und Zentrale Naturalregionen (2); Afghanistan (3).

Chrysolina (Minckia) chalcites (GERMAR, 1824)

Chrysolina chalcites GERMAR, 1824: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Westliche Naturalregion (1); Badakhshan, 50 km S von Maimana, 1,500 m (2).

Chrysolina (Lithopteroides) exanthematica (WIEDEMANN, 1821)

Chrysomela exanthematica WIEDEMANN, 1821: LOPATIN, 1967 (1).

Chrysolina exanthematica WIEDEMANN, 1821: MEDVEDEV, 1983 (2), 1985 (3).

Literaturangaben: O Afghanistan (Prov. Nangarhar: Laghman) (1); Nuristaner und Kabul-Jalalabader Naturalregionen (2); Laghman, Samakat, 1,500 m; Nangarhar, Jalalabad, 550 m; Nuristan, Waigal-Fluß, 2,500 m (3).

Chrysolina (Dlochrysa) fastuosa ventricosa (SUFFRIAN, 1868)

Dlochrysa fastuosa ventricosa SUFFRIAN, 1868: KIMOTO, 1966 (1).

Chrysolina fastuosa ventricosa SUFFRIAN, 1868: MEDVEDEV, 1983 (2).

Literaturangaben: Barak (1); Badakhshaner Naturalregion (2).

Chrysolina (Chalcoidea) haarlovi (JAKOB, 1962)

Chrysomela haarlovi JAKOB, 1962: JAKOB, 1962 (1).

Chrysolina haarlovi JAKOB, 1962: MEDVEDEV, 1983 (2).

Literaturangaben: Herat (1); Westliche Naturalregion (2).

Chrysolina (Chalcoidea) hyrcana (WEISE, 1884)

Oreina hyrcana ab. *chalybaea* BRANCAZI, 1899: BECHYNÉ, 1961 (1).

Chrysomela hyrcana WEISE, 1884: LOPATIN, 1963 (2).

Chrysolina hyrcana WEISE, 1884: MEDVEDEV, 1983 (3).

Literaturangaben: Herat, 970 m (1, 2); Nuristaner Naturalregion (3).

Chrysolina (Taeniostica) imperfecta (BREIT, 1920)

Chrysomela imperfecta BREIT, 1920: BREIT, 1920 (1); WINKLER, 1930 (2); LOPATIN, 1967 (3).

Chrysolina imperfecta BREIT, 1920: MEDVEDEV, 1983 (4).

Literaturangaben: N Afghanistan ("Kuschke"=Kushk) (1); Afghanistan (2); N Afghanistan (Prov. Herat, Balamurghab, 470 m) (3); Ostliche Naturalregion (4).

Chrysolina (Menthastriella) modesta uzbekorum BECHYNÉ, 1950

Chrysomela coerulans subfastuosa MOTSCHULSKY, 1860: REINECK, 1937 (1).

Chrysolina coerulans uzbekorum BECHYNÉ, 1950: BECHYNÉ, 1950 (2); LOPATIN, 1977 (3).

Chrysolina coerulans iranica JAKOB, 1954: JAKOB, 1962 (4).

Chrysomela coerulans uzbekorum BECHYNÉ, 1950: LOPATIN, 1963 (5).

Chrysomela modesta uzbekorum BECHYNÉ, 1950: DACCORDI, 1976 (6), 1976a (7); MEDVEDEV, 1983 (8), 1985 (9).

Literaturangaben: NO Afghanistan (Schuker, Schuk-Tal) (1); Kabul (2); N Afghanistan (3); Panjao, Koh-i-Baba; Paghman; Pirzada (4); NO Afghanistan (Badakhshan, Kokcha-Tal, Kalasan, 2,000 m; Faizabad, 1,450 m; Nuristan, Baschgul-Tal, Ahmede-Dewane, 2,700 m) (5); Afghanistan (6, 7); Badakhshaner, Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (8); Prov.: Bamiyan, Ghor, Nuristan, Badakhshan, Farah, 1,000–3,000 m (9).

Chrysolina (Diachalcoidea) sacarum (WEISE, 1890)

Chrysolina sacarum WEISE, 1890: BECHYNÉ, 1955 (1); MEDVEDEV, 1983 (2), 1985 (3).

Oreina sacarum WEISE, 1890: BECHYNÉ, 1961 (4).

Chrysomela sacarum WEISE, 1890: JAKOB, 1962 (5); LOPATIN, 1963 (6).

Literaturangaben: Afghanistan (1); Badakhshaner, Kabul-Jalalabader, Zentrale und Ostliche Naturalregionen (2); Prov.: Kabul, Badakhshan, Bamiyan, Ghor, Baghlan, Oruzgan, Herat, Ghazni, 1,100–3,500 m (3); Kabul (4); Panjao, Koh-i-Baba (5); NO Afghanistan (Badakhshan, Sarekanda-Geb., 2,800 m und 4,000 m) (6).

Untersuchtes Material: Kushk, leg. HAUSER (Budapest). Aedeagus untersucht.

Chrysomela populi LINNAEUS, 1758

Melasoma populi LINNAEUS, 1758: REINECK, 1937 (1); JAKOB, 1962 (2); LOPATIN, 1963 (3), 1969 (4).

Chrysomela populi LINNAEUS, 1758: BECHYNÉ, 1961 (5); MEDVEDEV, 1983 (6), 1985 (7).

Melasoma asiatica JAKOB, 1962: JAKOB, 1962 (2).

Melasoma parvicollis JAKOB, 1962: JAKOB, 1962 (2).

Literaturangaben: NO Afghanistan (Pushki, Parun-Tal) (1); Wama, Nuristan; Paghman (2); Badakhshan, Sarekanda-Geb., 2,000 m und 2,800 m; Ahmede-Dewane, 2,800 m; Peschwurdo, 2,200 m; Paghman-Geb., 2,300 m (3); Z Afghanistan (Kabul: Prov. Lalanda, 2,250 m) (4); Kabul (5); Badakhshaner, Kabul-Jalalabader, Zentrale und Ostliche Naturalregionen (6); Prov.: Kabul, Badakhshan, Ghazni, Bamiyan (7).

Chrysomela quadricollis (JAKOB, 1962)

Melasoma quadricollis JAKOB, 1962: JAKOB, 1962 (1).

Literaturangaben: Panjao, Koh-i-Baba (1). [Fraglich!]

Chrysomela saliceti afghanica (REINECK, 1937)

Melasoma saliceti afghanica REINECK, 1937: REINECK, 1937 (1).

Melasoma turkestanica afghanica REINECK, 1937: JAKOB, 1955 (2).

Literaturangaben: NO Afghanistan (Ramgul-Tal zwischen Paschal und Gadu) (1); Afghanistan (2).

Chrysomela saliceti turkestanica (REINECK, 1937)

Melasoma saliceti turkestanica REINECK, 1937: REINECK, 1937 (1).

Melasoma turkestanica REINECK, 1937: JAKOB, 1955 (2), 1962 (3).

Chrysomela saliceti turkestanica REINECK, 1937: LOPATIN, 1977 (4); MEDVEDEV, 1983 (5), 1985 (6).

Literaturangaben: O Afghanistan (Panjao, Koh-i-Baba) (1, 2); Afghanistan (3, 4); Nuristaner, Kabul-Jalalabader, Zentrale und Ostliche Naturalregionen (5); Prov.: Kabul, Ghazni, Bamiyan, 1,500–2,800 m (6).

Chrysomela tremulae FABRICIUS, 1787

Melasoma tremulae FABRICIUS, 1787: JAKOB, 1962 (1).

Chrysomela tremulae FABRICIUS, 1787: MEDVEDEV, 1983 (2).

Literaturangaben: Panjao, Koh-i-Baba (1); Kabul-Jalalabader Naturalregion (2).

Colaphellus apicalis (MÉNÉTRIÈS, 1849)

Colaphellus apicalis MÉNÉTRIÈS, 1849: LOPATIN, 1963 (1), 1967 (2); MEDVEDEV, 1983 (3).

Literaturangaben: S Afghanistan (Kandahar-Kuna, 950 m) (1); N Afghanistan (Prov. Herat: 1–3 km SW Balamurghab, 550 m; Balamurghab, 470 m) (2); Badakhshaner Naturalregion (3).

Colaphellus sophiae hoefti (MÉNÉTRIÈS, 1832)

Colaphellus sophiae hoefti MÉNÉTRIÈS, 1832: LOPATIN, 1967 (1); MEDVEDEV, 1983 (2).

Literaturangaben: N Afghanistan (Prov. Kataghan: 10–15 km O Kunduz, 400 m) (1); Badakhshaner Naturalregion (2).

Crosita (s. str.) *afghanica* LOPATIN, 1962

Crosita afghanica LOPATIN, 1962: LOPATIN, 1962 (1), 1963 (2); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Badakhshan, Sarekanda-Geb., 4,000 m und 4,100 m) (1, 2); Badakhshaner Naturalregion (3).

Crosita (Bittotaenia) grata (FALDERMANN, 1837)*Chrysomela grata* FALDERMANN, 1837: JAKOB, 1962 (1).*Crosita grata* FALDERMANN, 1837: LOPATIN, 1963 (2), 1967a (3), 1969 (4).*Chrysolina grata* FALDERMANN, 1837: MEDVEDEV, 1983 (5), 1985 (6).

Literaturangaben: Panjao, Koh-i-Baba (1); O Afghanistan (Umgeb. Kabul, 1,740 m) (2); Khurd-Kabul, SO von Kabul, 1,900 m (3); Prov. Nangarhar (Jalalabad, 560–580 m) (4); Westliche, Kabul-Jalalabader, Zentrale und Ostliche Naturalregionen (5); Prov.: Herat, Farah, Oruzgan, Kabul, Ghazni, Bamiyan, Nangarhar, 900–3,000 m (6).

Crosita (Bittotaenia) lia (JACOBSON, 1895)*Crosita lia* JACOBSON, 1895: LOPATIN, 1963 (1).*Chrysolina lia* JACOBSON, 1895: MEDVEDEV, 1983 (2), 1985 (3).

Literaturangaben: NO Afghanistan (Badakhshan, Minhan-Geb., Sanglich); Z Afghanistan (Hazaradjat, Band-i-Amir, 2,900 m); O Afghanistan (Hindukush, Khinjan-Tal, Do-Schak, 2,500 m) (1); Badakhshaner, Kabul-Jalalabader, Zentrale und Ostliche Naturalregionen (2); Prov.: Herat, Ghor, Kandahar, Ghazni, Badakhshan, Nuristan, 1,200–2,600 m (3).

Crosita (Bittotaenia) mellyi (STÅL, 1857)*Crosita grata mellyi* STÅL, 1857: LOPATIN, 1967 (1).*Crosita mellyi* STÅL, 1857: BECHYNÉ, 1950 (2).

Literaturangaben: O Afghanistan (Prov. Nangarhar: Jalalabad; Samrchel, 900 m) (1); Afghanistan (2).

Untersuchtes Material: Qargha, 2,000–2,100 m, 12. IV. 1974, leg. L. PAPP (Budapest); Paghman-Geb., 5 km SW Paghman, 1,700–2,950 m, 5. V. 1974, leg. L. PAPP (Budapest).

Entomoscelis adonidis (PALLAS, 1771)*E. adonidis* PALLAS, 1771: LOPATIN, 1969 (1); MEDVEDEV, 1983 (2), 1985 (3).

Literaturangaben: O Afghanistan (Prov. Nangarhar: Jalalabad, 580 m) (1); Kabul-Jalalabader und Zentrale Naturalregionen (2); Kabul, 1,800 m (3).

Entomoscelis erythrocnema JACOBSON, 1893*E. erythrocnema* JACOBSON, 1893: LOPATIN, 1967 (1), 1969 (2); MEDVEDEV, 1983 (3).

Literaturangaben: N Afghanistan (Prov. Maimana: Rashid, 700 m; Prov. Kataghan: 10 km S Aliabad, 450 m und 10–15 km O Kunduz, 400 m) (1); Kunduz, 400 m; Baghlan, 750 m (2); Nordliche, Nordwestliche und Badakhshaner Naturalregionen (3).

Entomoscelis sacra (LINNAEUS, 1758)*E. sacra* LINNAEUS, 1758: BECHYNÉ, 1961 (1); LOPATIN, 1963 (2).

Literaturangaben: Herat, 970 m (1); O Afghanistan (Kunar-Tal, Jalalabad, 500 m); S Afghanistan (Kandahar, 950 m) (2). [Fraglich!]

Gastrophysa polygoni (LINNAEUS, 1758)*Gastroidea polygoni* LINNAEUS, 1758: JAKOB, 1962 (1).*Gastrophysa polygoni* LINNAEUS, 1758: LOPATIN, 1963 (2), 1967 (3), 1969 (4); MEDVEDEV,

1983 (5), 1985 (6).

Literaturangaben : Ghilzai, Koh-i-Baba ; Panjao, Koh-i-Baba (1); NO Afghanistan (Badakhshan, Schiva, Hochsteppe, 2,800 m) (2); N Afghanistan (Prov. Herat : Balamurghab ; 1–3 km SW Balamurghab, 550 m ; Buzba, 800 m ; Wadi-i-Namak Shor, 400 m) (3); N Afghanistan (Prov. Kataghan : Kunduz, 400 m) (4); Badakhshaner und Zentrale Naturalregionen (5); Oruzgan, N Shahristan, 3,200 m (6).

Oreomela meridionalis hindukushi L. MEDVEDEV, 1985

O. meridionalis hindukushi L. MEDVEDEV, 1983 (nom. nud.): MEDVEDEV, 1983 (1).

O. meridionalis hindukushi L. MEDVEDEV, 1985: MEDVEDEV, 1985 (2).

Literaturangaben : Nuristaner Naturalregion (1); Nuristan, Waigal-Fluß, 3,000 m (2).

Phaedon (Neophaedon) pyritosus (ROSSI, 1792), s. str.

Neophaedon pyritosus ROSSI, 1792: LOPATIN, 1977 (1).

Literaturangaben : N Afghanistan (1).

Phaedon (Neophaedon) pyritosus alutaceus FLEISCHER, 1909

Neophaedon pyritosus alutaceus FLEISCHER, 1909: LOPATIN, 1967 (1), 1977 (2); MEDVEDEV, 1983 (3).

Literaturangaben : N Afghanistan (Prov. Herat : Balamurghab, 470 m ; Buzba, 800 m (1); Hindukush (2); Zentrale Naturalregion (3).

Plagioderma versicolora (LAICHARTING, 1781)

P. versicolora LAICHARTING, 1781: REINECK, 1937 (1); JAKOB, 1962 (2); LOPATIN, 1963 (3), 1967 (4); MEDVEDEV, 1983 (5), 1985 (6).

Literaturangaben : NO Afghanistan (Burbutz im Kti-Tal ; Puschki im Parun-Tal ; Gultscheilam); O Afghanistan (Tschitral) (1); Istalif (2); NO Afghanistan (Nuristan, Baschgul-Tal, Kamdesh, 2,200 m ; Peschwurdo, 2,200 m ; Ahmede-Dewane, 2,800 m); O Afghanistan (Ghorband-Tal, 1,900 m); S Afghanistan (Kandahar, 950 m) (3); NO Afghanistan (Pech-Tal, 1,100 m) (4); Badakhshaner, Nuristaner, Kabul-Jalalabader, Zentrale und Ostliche Naturalregionen (5); Prov.: Kabul, Ghazni, Badakhshan, Nuristan, Oruzgan, 1,100–3,000 m (6).

Unterfamilie Alticinae

Altica balassogloi (JACOBSON, 1892)

Haltica suworovi OGLOBLIN, 1921: LOPATIN, 1966 (1); KIMOTO, 1966 (2).

A. balassogloi JACOBSON, 1892: MEDVEDEV, 1983 (3).

Literaturangaben : NO Afghanistan (Badakhshan, Ischkaschim) (1); Ischkaschim (2); Badakhshaner Naturalregion (3).

Altica cyanea (WEBER, 1801)

Haltica cyanea WEBER, 1801: LOPATIN, 1966 (1); MADAR & MADAR, 1968 (2); MEDVEDEV, 1983 (3).

Literaturangaben : O Afghanistan (Sarobi, 1,100 m) (1); O Afghanistan (Prov. Nangarhar : bei Jalalabad ; Darunta-Jalalabad ; Laghman) (2); Kabul-Jalalabader

Naturalregion (3).

Altica deserticola (WEISE, 1889)

Haltica deserticola WEISE, 1889: LOPATIN, 1963 (1); MADAR & MADAR, 1969 (2).

A. deserticola WEISE, 1889: KIMOTO, 1966 (3); MEDVEDEV, 1983 (4).

Literaturangaben: NO Afghanistan (Badakhshan, Koksha-Tal, Senna, 1800 m); O Afghanistan (Umgb. Kabul, 1,740 m; Tangi-Saidan bei Kabul, 1,750 m) (1); N Afghanistan (Prov. Herat: Balamurghab, 470 m) (2); Barak (3); Badakhshaner und Nuristaner Naturalregionen (4).

Altica nuristanica (LOPATIN, 1963)

Haltica nuristanica LOPATIN, 1963: LOPATIN, 1963 (1).

A. nuristanica LOPATIN, 1963: MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, Kamdesch, 2,200 m; Kamu, 1,500 m; Purstan, 1,700 m; Ahmede-Dewane); O Afghanistan (Kunar-Tal, 500 m, Jalalabad; Umgb. Laghman am Kabul-Fluß, 1,500 m) (1); Nuristaner und Kabul-Jalalabader Naturalregionen (2).

Altica palustris (WEISE, 1888)

Haltica palustris WEISE, 1888: LOPATIN, 1963 (1).

A. palustris WEISE, 1888: MEDVEDEV, 1983 (2).

Literaturangaben: S Afghanistan (Kandahar-Kuna, 950 m) (1); Zentrale Naturalregion (2).

Untersuchtes Material: Paghman-Fluß, 16 km W Kabul, 1,850 m, 10. V. 1974, leg. L. PAPP (Budapest).

Altica tamaricis SCHRANK, 1785

Haltica tamaricis SCHRANK, 1785: REINECK, 1937 (1).

Haltica tamaricis ?lazulina OGLOBLIN, 1917: LOPATIN, 1963 (2).

A. tamaricis SCHRANK, 1785: MEDVEDEV, 1983 (3).

Literaturangaben: NO Afghanistan (Gultscheilam) (1); Afghanistan (2); Badakhshaner Naturalregion (3).

Aphthona abdominalis (DUFTSCHMIDT, 1825)

Neu für die Fauna Afghanistans: Nangarhar, Jalalabad, 560 m, 17. IV. 1974, leg. L. PAPP (Budapest).

Bekannt aus: S Frankreich, Balearen, Korsika, Rheinland, Thüringen, Sachsen, Österreich, Schlesien, S Polen, N Italien, Slowenien, Istrien, Dalmatien, Bosnien-Herzegowina, Montenegro, Bulgarien, Ungarn, Ukraine (mit Krim), Kleinasien, Aserbaidshan, Kasachstan, N Iran.

Aphthona armeniaca WEISE, 1889

A. armeniaca WEISE, 1889: CSIKI & HEIKERTINGER, 1940 (1); HEIKERTINGER, 1944 (2); LOPATIN, 1963 (3); KIMOTO, 1966 (4); MEDVEDEV, 1983 (5).

Literaturangaben: Afghanistan (1, 2); NO Afghanistan (Badakhshan, Wardudzh-Tal, Tschakaran, 1,850 m); O Afghanistan (Hindukush, Salang-Tal, Walang, 2,550 m) (3); Barak (4); Badakhshaner und Zentrale Naturalregionen (5).

Aphthona flaviceps ALLARD, 1859

A. flaviceps ALLARD, 1859: BECHYNÉ, 1961 (1); LOPATIN, 1963 (2); MADAR & MADAR, 1969 (3); MEDVEDEV, 1983 (4).

Literaturangaben: Pul-i-Khumri (1); NO Afghanistan (Nuristan, Kamdesh, 2,200 m; Baschgul-Tal, 1,200–2,200 m) (2); N Afghanistan (Prov. Herat: Balamurghab, 470 m; Buzba, 800 m; Murichaq, 400 m; Prov. Kataghan: Baghlan) (3); Nuristaner und Zentrale Naturalregionen (4).

Aphthona gracilis FALDERMANN, 1836

A. gracilis FALDERMANN, 1836: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Wardudzh-Tal, Tschakaran, 1,850 m; Kokcha-Tal, Faizabad, 1,450 m; Sarekanda-Geb., 4,100 m; Kunduz-Tal, Duab, Schikari, 1,100 m; Kataghan, Khanabad, 650 m); O Afghanistan (Umgb. Kabul, 1,740 m); Z Afghanistan (Hazaradjad, Band-i-Amir, 2,900 m); S Afghanistan (Kandahar, 950 m) (1); Nordliche, Nordostliche, Badakhshaner, Kabul-Jalalabader und Zentrale Naturalregionen (2).

Untersuchtes Material: Kabul, Darulaman, 1,820 m, 18. V. 1976, leg. L. PAPP (Budapest).

Aphthona hauseri HEIKERTINGER, 1911

Neu für die Fauna Afghanistans: Chemtala, NW Kabul, 1,900 m, 30. V. 1974, leg. L. PAPP (Budapest).

Bekannt aus: Turkmenien, Usbekistan.

Aphthona hissarica LOPATIN, 1975

A. hissarica LOPATIN, 1975: LOPATIN, 1975 (1).

Literaturangaben: NO Afghanistan (1).

Aphthona imitatrix LOPATIN, 1963

A. imitatrix LOPATIN, 1963; LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Kunar-Tal, Jalalabad, 500 m; Umgb. Kabul, 1,740 m) (1); Kabul-Jalalabader Naturalregion (2).

Aphthona jacobsoni OGLOBLIN, 1925

A. jacobsoni OGLOBLIN, 1925: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Badakhshan, Schiva, 2,800 m); S Afghanistan (Kandahar-Kuna, 950 m) (1); Westliche und Zentrale Naturalregionen (2).

Aphthona jalalabadensis MADAR et MADAR, 1969

A. jalalabadensis MADAR et MADAR, 1969: MADAR & MADAR, 1969 (1).

Literaturangaben: O Afghanistan (Prov. Nangarhar: Jalalabad, 560 m) (1).

Aphthona promisa OGLOBLIN, 1926

A. promisa OGLOBLIN, 1926: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, Kamdesh) (1); Nuristaner Naturalregion (2).

Aphthona reinecki LOPATIN, 1963

A. reinecki LOPATIN, 1963: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, 1,100 m) (1); Nuristaner Naturalregion (2).

Asiolestia sublaevis (MOTSCHULSKY, 1859)

A. sublaevis MOTSCHULSKY, 1859: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Badakhshaner Naturalregion (1); Badakhshan, Ischkaschim, 2,500 m (2).

Chaetocnema (s. str.) *afghana* sp. n.

Körper kurz, eiförmig, mit deutlich gebogenen Seiten, mäßig gewölbt, metallbläulich. Färbung dunkelgrün mit sehr leichtem Bronzeschimmer (manchmal Halsschild stärker bronze-grünlich). Beine hellgelb, Hintersehenkel dunkler, braun mit grünem metallischen Schimmer. Fühler mit geschwärzten 6-7 Apikalgliedern. Oberlippe pechschwarz. Kopf fein schagriniert und gänzlich und gleichmäßig mäßig stark punktiert. Fühler etwas länger als die halbe Körperlänge. Halsschild quer, annähernd $1\frac{1}{3}$ -mal breit als lang, mit sehr schwach gebogenen Seiten, nach vorn und hinten fast gleich verschmälert, am breitesten in der Mitte; Punktierung gleichmäßig, dicht (Zwischenräume nicht breiter oder manchenorts bißchen breiter als der Punktdurchmesser) und mäßig stark (kaum merklich stärker als die von *Ch. arida*) auf deutlich schagriniertem Grund. Flügeldecken breiter als das Halsschild, $1\frac{1}{3}$ -mal länger als zusammen breit, nach hinten sehr stark verengt und gespitzt, mit deutlich hervorgehobenen Schulterbeulen; Punkte in der Längsreihen tief, dicht und regelmäßig (manchmal die Nahtreihen mit 1-2 verstellten Punkten); Skutellarpunkte in nicht regelmäßiger Doppelreihe; Zwischenräume eben und fein skulptiert. Männchen: Erstes Glied der Vordertarsen erbreitet, herzförmig, so breit oder wenig breiter als das dritte Glied. Aedeagus (Abb. 1) breit, mit Parallelseiten, mit einem spitzen und verlängerten dreieckigen Apex, $\frac{1}{4}$ der gesamten Aedeaguslänge umfaßend. Unter-

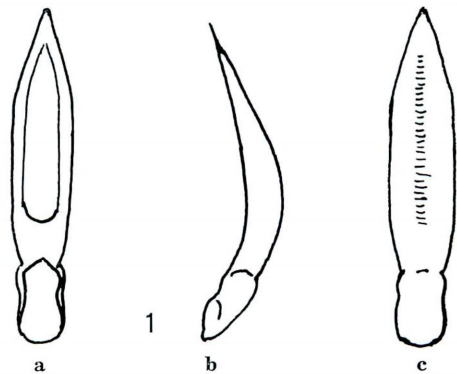


Abb. 1. Aedeagus von *Chaetocnema afghana* sp. n.

a, ventral; b, lateral; c, dorsal.

Unter-

seite mit breiter und untiefer Längsrinne; Rückenseite der mittleren Längslinie entlang deutlich quer geriffelt. Profil leicht gebogen und mit geradem Apikalteil.

L. 1.9–2.2 mm.

Untersuchtes Material: Nangarhar, Band-e-Darunta, 590 m, 8. V. 1974, leg. L. PAPP, 1 ♂ (Holotype; Ungarisches Naturwissenschaftliches Museum – Budapest), 1 ♂, 2 ♀ (Paratopotypen; Ungarisches Naturwissenschaftliches Museum – Budapest), 1 ♂ Paratopotype (Sammlung des Autors).

Chaetocnema (Tlanoma) basalis (BALY, 1877)

C. basalis BALY, 1877: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Tangi-Gharuh, Kabul-Fluß, 1,600 m) (1); Kabul-Jalalabader Naturalregion (2).

Chaetocnema (Tlanoma) breviscula (FALDERMANN, 1837)

C. breviscula FALDERMANN, 1837: LOPATIN, 1963 (1); MADAR & MADAR, 1968 (2); MEDVEDEV, 1983 (3).

Literaturangaben: O Afghanistan (Kunar-Tal, Jalalabad, 500 m); S Afghanistan (Kandahar-Kuna, 950 m; Kandahar, 950 m) (1); N Afghanistan (Prov. Herat: Balamurghab, 470 m) (2); Nuristaner und Zentrale Naturalregionen (3).

Chaetocnema (s. str.) *costulata* (MOTSCHULSKY, 1860)

C. costulata MOTSCHULSKY, 1860: GRUEV, 1982 (1).

Literaturangaben: Paghman-Geb., 6–7 km SW Paghman, 2,800–2,950 m (1).

Chaetocnema (s. str.) *hortensis* (GEOFFROY, 1785)

C. hortensis GEOFFROY, 1785: BECHYNÉ, 1961 (1); LOPATIN, 1963 (2); KIMOTO, 1966 (3); MADAR & MADAR, 1968 (4); MEDVEDEV, 1983 (5).

C. hortensis brenskei PIC, 1910: MADAR & MADAR, 1968 (4).

Literaturangaben: Pul-i-Khumri, 700 m; Balkh, 400 m; Korees Duobi bei Balamurghab, 600 m (1); NO Afghanistan (Badakhshan, Sarekanda-Geb., 3,500 m und 4,100 m; Nuristan, Baschgul-Tal, Kamdesh, 2,000 m); O Afghanistan (Umgb. Kabul, 1,740 m; Hindukush, Salang-Tal, 2,520 m; Walang, 2,750 m; Khinjan-Tal, Do-Schak, 2,500 m); S Afghanistan (Kandahar, 950 m; Kandahar-Kuna, 950 m) (2); Faizabad; Barak (3); N Afghanistan (Prov. Herat: Balamurghab, 470 m) (4); Nordliche, Nordwestliche, Badakhshaner, Westliche, Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (5).

Untersuchtes Material: Kabul, 1,780 m, 30. IV. 1974, leg. L. PAPP (Budapest); Hari Rud-Fluß, 8 km SW Herat, 20. V. 1974, leg. L. PAPP (Budapest); Bini, Hesar See, 5 km SO Kabul, 13. VI. 1974, leg. L. PAPP (Budapest); Paghman-Geb., 5–7 km SW Paghman, 2,750–2,950 m, 15. V. 1974, leg. L. PAPP (Budapest); Paghman-Fluß, 16 km W Kabul, 10. V. 1974, leg. L. PAPP (Budapest).

Chaetocnema (s. str.) *ingenue* (BALY, 1876)

C. ingenue BALY, 1876: GRUEV, 1982 (1).

Literaturangaben: Nangarhar, Band-i-Darunta, 950 m (1).

Chaetocnema kabakovi LOPATIN, in litt.

C. kabakovi LOPATIN, in litt.: MEDVEDEV, 1983 (nom. nud.) (1).

Literaturangaben: Nuristaner Naturalregion (1).

Chaetocnema (s. str.) *klapperichi* LOPATIN, 1963

C. klapperichi LOPATIN, 1963: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, 1,300 m); O Afghanistan (Umgb. Kabul, 1,740 m; Kunar-Tal, Jalalabad, 500 m) (1); Nuristaner und Kabul-Jalalabader Naturalregionen (2).

Chaetocnema (s. str.) *montenegrina* HEIKERTINGER, 1912

C. montenegrina HEIKERTINGER, 1912: LOPATIN, 1967a (1); MADAR & MADAR, 1968 (2); MEDVEDEV, 1983 (3).

Literaturangaben: Kabul (1); N Afghanistan (Prov. Herat: Balamurghab, 470 m; Murichaq, 400m) (2); Kabul-Jalalabader Naturalregion (3).

Chaetocnema (s. str.) *psylloides* PIC, 1909

C. psylloides PIC, 1909: LOPATIN, 1963 (1), 1982 (2); KIMOTO, 1966 (3); MEDVEDEV, 1983 (4).

Literaturangaben: NO Afghanistan (Badakhshan, Schiva, 2,800 m; Sarekanda-Geb., 3,500 m; Badakhshan, Faizabad, Kokcha-Tal, 1,450 m; Nuristan, Baschgul-Tal, Ahmede-Dewane, 2,800 m); O Afghanistan (Umgb. Kabul, 1,740 m; Hindukush, Khinjan-Tal, Do-Schak, 2,500 m; Salang-Tal, Walang, 2,750 m) (1, 2); Faizabad: Karezmul (3); Westliche, Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (4).

Chaetocnema (*Tlanoma*) *tibialis* (ILLIGER, 1807)

Neu für die Fauna Afghanistans: Paghman-Geb., 5–7 km SW Paghman, 2,750–2,950 m, 15. V. 1974, leg. L. PAPP (Budapest).

Bekannt aus: S Europa, Österreich, Tschechoslowakei, Karpaten, S Polen, S Rußland, Kaukasus, Kleinasien, Syrien, Irak, Mittelasien, Kasachstan, Korea, N Afrika.

Epitrix abeillei (BAUDUER, 1874)

Epithrix abeillei BAUDUER, 1874: LOPATIN, 1963 (1); MADAR & MADAR, 1969 (2); MEDVEDEV, 1983 (3).

Literaturangaben: Z Afghanistan (Hazaradjat, Bamiyan, 2,500 m); O Afghanistan (Tangi-Gharuh am Kabul-Fluß, 1,600 m; Umgb. Kabul, 1,740 m; Durufulun bei Kabul, 1,800 m); S Afghanistan (Kandahar, 950 m) (1); N Afghanistan (Prov. Herat; Balamurghab, 470 m) (2); Westliche, Kabul-Jalalabader und Zentrale Naturalregionen (3).

Untersuchtes Material: Kabul, Tschelsotun, 1,850 m, 27. V. 1974, leg. L. PAPP (Budapest).

Longitarsus albineus (FOUDRAS, 1860)

L. albineus FOU DRAS, 1860: BECHYNÉ, 1961 (1); LOPATIN, 1963 (2); MADAR & MADAR, 1969 (3); MEDVEDEV, 1983 (4).

Literaturangaben: Gulbahar, 1,700 m (1); Nuristan, Baschgul-Tal, 1,200 m; O

Afghanistan (Umgb. Kabul, 1,740 m); S Afghanistan (Kandahar, 950 m) (2); N Afghanistan (Prov. Herat: Balamurghab, 470 m und 550 m; Murichaq, 400 m) (3); Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (4).

Longitarsus anchusae (PAYKULL, 1799)

L. anchusae PAYKULL, 1799: MADAR & MADAR, 1969 (1).

Literaturangaben: N Afghanistan (Prov. Herat: Balamurghab, 470 m) (1). [Fraglich !] (s. MADAR & MADAR, l. c.).

Longitarsus asperifoliarum WEISE, 1887, s. str.

L. asperifoliarum WEISE, 1887: LOPATIN, 1963 (1), 1967a (2); MEDVEDEV, 1983 (3).

Literaturangaben: NO Afghanistan (Badakhshan, Kokcha-Tal, Faizabad, 1,450 m); O Afghanistan (Umgb. Kabul 1,800 m) (1); Paghman, 30 km NW Kabul, 2,500 m; NO Kandahar) (2); Badakhshaner und Kabul-Jalalabader Naturalregionen (3).

Untersuchtes Material: Tscheheltan, 17 km WSW Kabul, 200 m, 19. IV. 1974, leg. L. PAPP (Budapest).

Longitarsus asperifoliarum afghanica LOPATIN, 1963

L. asperifoliarum afghanica LOPATIN, 1963: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, 1,100 m) (1); Nuristaner Naturalregion (2).

Longitarsus beroni sp. n.

Länglichoval, mäßig gewölbt, glatt und glänzend. Oberseite des Körpers, Fühler und Beine gelbbraunlich; Körper-Unterseite und hintere Schenkel dunkler, rötlich-braun. Kopf fein quer gerunzelt; Stirnbeulen fehlen. Fühler ein bißchen länger als der Körper; 4-6 Glieder 3-mal länger als breit. Halsschild etwa $1\frac{1}{4}$ -mal breiter als lang, mit leicht und gleichmäßig gebogenen Seiten, am breitesten in der Mitte; Punktierung undeutlich. Flügeldecken mit schwach Schulterbeulen und mit schwachen gebogenen Seiten; Punktierung deutlich aber seicht. Hintere Flügel nicht entwickelt. Hinterschienen gerade, ohne Innenrandleiste und mit normal langer Spore. Erstes Glied der Hintertarsen gleich dünn in seiner ganzen Länge. Erstes Glied der Vordertarsen verlängert und verbreitert, so breit in der Mitte wie das

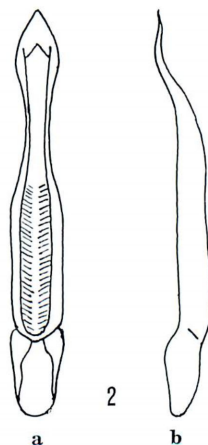


Abb. 2. Aedeagus von *Longitarsus beroni* sp. n.
a, ventral; b, lateral.

3. Glied. Aedeagus (Abb. 2) verlängert, stark verengt in seiner Apikalhälfte und mit spitzem dreieckigen Apex. Unterseite mit Längsrinne (seitlich begrenzt mit scharfen aufgehobenen Seitenrändern), die in ihrer Basis erweitert und schräg zweiseitig geriffelt ist und einen Längsmittelkiel hat. Profil mit leichter wellenartig gebogenem Apikalteil.

L. 2.75 mm.

Die Art ist zu der Gruppe von *L. succineus* zuzuzählen, die durch LEONARDI (1972, 1976) morphologisch gut charakterisiert worden war, und die die Arten *succineus* (FOUDRAS), *noricus* LEONARDI, *aeruginosus* (FOUDRAS), *symphyti* HEIKERTINGER und *nitidamiculus* KIMOTO umfaßt. Mit allen den weist sie Ähnlichkeit in Körperform und Farbe, Fühlerlänge, Flügeldecken-Punktierung und Aedeagusform auf. Unterscheidet sich allerdings deutlich durch sein ziemlich erbreitetes erstes Glied der Vordertarsen (ähnlich dem wie bei *L. noricus*) und durch den stark gespitzten Aedeagusapex.

Untersuchtes Material: Kabul, 1,800 m, 2–19. VI. 1986, leg. P. BERON, 1 ♂, Holotype (Nat. Naturwiss. Museum, Sofia).

Die neue Art ist nach dem Namen meines Freundes und Kollegen P. BERON aus dem Nationalen Naturwissenschaftlichen Museum in Sofia benannt worden.

Longitarsus curtus (ALLARD, 1860)

L. curtus ALLARD, 1860: BECHYNÉ, 1961 (1); MEDVEDEV, 1983 (2).

Literaturangaben: Herat, 970 m (1); Westliche Naturalregion (2). [Fraglich !] (s. BECHYNÉ, l. c.).

Longitarsus desertorum HEIKERTINGER, 1913

L. desertorum HEIKERTING, 1913: LOPATIN, 1963 (1); KIMOTO, 1966 (2); MEDVEDEV, 1983 (3).

Literaturangaben: NO Afghanistan (Badakhshan, Wardudzh-Tal, Tschakaran, 1,850 m; Barak, 1,650 m; Kokcha-Tal, Faizabad, 1,450 m; Kataghan, Bangi-Fluß, Khanabad, 650 m); O Afghanistan (Umgeb. Kabul, 1,740 m; Durufulun bei Kabul, 1,800 m); S Afghanistan (Kandahar, 950 m) (1); Barak; Kabul (2); Badakhshaner, Kabul-Jalalabader und Zentrale Naturalregionen (3).

Untersuchtes Material: Tscheheltan, 17 km WSW von Kabul, 2,000 m, 19. IV. 1974, leg. L. PAPP (Budapest); Kabul, Aliabad, 1,800 m, 5. VI. 1974, leg. L. PAPP (Budapest) und 13. VI. 1974, leg. L. PAPP (Budapest); Kabul, Tschelsotun, 1,850 m, 27. V. 1974, leg. L. PAPP (Budapest); Kabul, Darulaman, 1,820 m, 18. VI. 1974, leg. L. PAPP (Budapest); Kabul, Hochsteppe, 2,000 m, 21. VII. 1966 (L. MEDVEDEV, Moskau); Kabul, 1,800 m, 2–19. VI. 1986, leg. P. BERON (Sofia). Aedeagus untersucht.

Longitarsus dimidiatus (ALLARD, 1866)

L. nitens KHNZORIAN, 1968: KHNZORIAN, 1968 (1); MADAR & MADAR, 1969 (2); LEONARDI, 1973 (3).

Literaturangaben: Afghanistan (1); N Afghanistan (Prov. Herat: Balamurghab, 470 m) (2, 3).

Longitarsus echii (KOCH, 1803)

L. echii KOCH, 1803: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, 1,100 m); S Afghanistan (Kandahar-Kuna, 950m) (1); Nuristaner und Zentrale Naturalregionen (2).

Longitarsus eminus WARCHALOWSKI, 1967

L. eminus WARCHALOWSKI, 1967: LOPATIN, 1977 (1); MEDVEDEV, 1983 (2), 1985 (3).

Literaturangaben: Afghanistan (1); Zentrale und Ostliche Naturalregionen (2); Kandahar, Bagtu, 1,800 m; Kandahar, Gbargai, 2,000 m; Paktia, Spera, 2,000 m (3).

Untersuchtes Material: Hazaradjat, Bamiyan, 2,500 m, leg. J. KLAPPERICH (det. I. LOPATIN) (I. LOPATIN, Minsk); Kandahar, Gbargai, X. 1970, leg. O. KABAKOV (L. MEDVEDEV, Moskau); Oruzgan, N Shahrstan, 3,200 m, Qonag-Paß, 25. VII. 1970 (L. MEDVEDEV, Moskau).

Longitarsus exoletus (LINNAEUS, 1758)

L. exoletus FOURDAS, 1860: LOPATIN, 1963 (1) MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Umgb. Kabul, 1,740 m und 1,800 m; Durufulun bei Kabul, 1,800 m) (1); Kabul-Jalalabader Naturalregion (2).

Longitarsus indigonaceus LOPATIN, 1963

L. indigonaceus LOPATIN, 1963: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, 2,800 m; Ahmede-Dewane; Kamdesh, 2,200 m; Purstan, 1,700 m) (1); Nuristaner Naturalregion (2).

Longitarsus melanocephalus (DEGEER, 1775)

L. melanocephalus DEGEER, 1775: LOPATIN, 1963 (1); MADAR & MADAR, 1969 (2) MEDVEDEV, 1983 (3).

Literaturangaben: NO Afghanistan (Badakhshan, Kokcha-Tal, Faizabad, 1,450 m); S Afghanistan (Kandahar, 950 m) (1); N Afghanistan (Prov. Herat: Balamurghab, 470 m); O Afghanistan (Prov. Nangarhar: Jalalabad) (2); Badakhshaner und Zentrale Naturalregionen (3).

Longitarsus melanoxanthus LOPATIN, 1963

L. melanoxanthus LOPATIN, 1963: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: S Afghanistan (Kandahar-Kuna, 950 m) (1); Zentrale Naturalregion (2).

Longitarsus mohri LOPATIN, 1963

L. mohri LOPATIN, 1963: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: S Afghanistan (Kandahar-Kuna, 950 m) (1); Zentrale Naturalregion (2).

Longitarsus murteus WARCHALOWSKI, 1972

L. murteus WARCHALOWSKI, 1972: WARCHALOWSKI, 1972 (1); LOPATIN, 1977 (2); LOPATIN & KULENOVA, 1986 (3).

Literaturangaben: N Afghanistan (Kuh-e-Baba-Geb., etwa 60 km NW Kabul) (1); NO Afghanistan (2, 3).

Longitarsus niger (KOCH, 1803)

L. niger KOCH, 1803: HEIKERTINGER, 1930 (1).

Literaturangaben: Afghanistan (1).

Longitarsus nigrofasciatus (GOEZE, 1777)

L. nigrofasciatus GOEZE, 1777: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Westliche, Kabul-Jalalabader, Zentrale und Ostliche Naturalregionen (1); Tagab, NO Kabul, 1,500 m; Ghazni, Mukur, 2,000 m; Oruzgan, Herab, 1,300 m; Baghlan, Puzenshen (2).

Longitarsus obliteratus (ROSENHAUER, 1847)

L. obliteratus ROSENHAUER, 1847: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Badakhshan, Schiva, 2,800 m; Nuristan, Baschgul-Tal, Kamu, 1,500 m; Kamdesh, 1,150 m und 2,200 m; Ahmede-Dewane, 2,800 m); O Afghanistan (Durufulun bei Kabul, 1,800 m; Tangi-Gharuch am Kabul-Fluß, 1,600 m; Hindukush, Aghelekan, 1,900 m; Salang-Tal, Walang, 2,520 m; Ghorband-Tal, 1,900 m; Andarab-Tal, Khinjan, 1,240 m); Z Afghanistan (Hazaradjat, Bamiyan, 2,500 m und Band-i-Amir, 2,900 m) (1); Badakhshaner, Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (2).

Es erscheint als notwendig das mitgeteilte Material zu revidieren, da es eine Reihe unlängst beschriebener Geschwister-Arten aus dieser Gruppe vorliegen (s. GRUEV, 1982a).

Longitarsus pellucidus (FOUDRAS, 1860)

L. pellucidus FODRAS, 1860: BECHYNÉ, 1961 (1); MADAR & MADAR, 1969 (2); MEDVEDEV, 1983 (3).

Literaturangaben: Pul-i-Khumri, 700 m (1); N Afghanistan (Prov. Herat: Balamurghab, 470 m; Murichaq, 400 m) (2); Nordliche und Nordwestliche Naturalregionen (3).

Untersuchtes Material: Logar, Noghulkhel, 2,000 m, 14. V. 1974, leg. L. PAPP (Budapest); Kabul, Aliabad, 1,800 m, 1-2. VI. 1974, leg. L. PAPP (Budapest). Aedeagus untersucht.

Longitarsus picicollis WEISE, 1900

L. picicollis WEISE, 1900: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Kabul-Jalalabader Naturalregion (1); Kabul, 1,800 m; Tagab, NO Kabul, 1,500 m; Garga, W Kabul, 2,000 m (2).

Untersuchtes Material: Kabul, Aliabad, 1,850-1,920 m, 3. IV. 1974, leg. L. PAPP (Budapest); Kabul, 11. I. 1938 (L. MEDVEDEV, Moskau); Kabul, Band-i-Ghazi, 11. I. 1934 (det. OGLOBLIN) (L. MEDVEDEV, Moskau).

Longitarsus pratensis (PANZER, 1784)

L. pratensis PANZER, 1784: LOPATIN, 1963 (1); KIMOTO, 1966 (2); MADAR & MADAR, 1969 (3); MEDVEDEV, 1983 (4).

Literaturangaben: NO Afghanistan (Badakhshan, Kokcha-Tal, Faizabad, 1,450 m); O Afghanistan (Umgb. Kabul, 1,740 m; Durufulun bei Kabul, 1,800 m; Hindukush, Salang-Tal, Walang, 2,550 m; Andarab-Tal, Khinjan, 1,240 m); S Afghanistan (Kan-

dahar, 950 m; Kandahar-Kuna, 950 m) (1); Karezmul (2); N Afghanistan (Prov. Herat: Balamurghab, 470 m; Murichaq, 400 m) (3); Badakhshaner, Kabul-Jalalabader und Zentrale Naturalregionen (4).

Longitarsus rangoonensis JACOBY, 1892

L. kophir LOPATIN, 1966: LOPATIN, 1966 (1); MEDVEDEV, 1983 (2).

L. rangoonensis JACOBY, 1892: SCHERER, 1969 (3).

Literaturangaben: O Afghanistan (Nuristan, Baschgul-Tal, Kamu, 1,300 m (1); Nuristaner Naturalregion (2); O Afghanistan (3).

Longitarsus rectelineatus (FOUDRAS, 1860)

L. rectelineatus FOU DRAS, 1860: BECHYNÉ, 1961 (1); LOPATIN, 1977 (2); MEDVEDEV, 1983 (3).

L. spilotus WEISE, 1900: LOPATIN, 1963 (4); KIMOTO, 1966 (5); MADAR & MADAR, 1969 (6); MEDVEDEV, 1983 (3).

Literaturangaben: Pul-i-Khumri, 700 m (1); N Afghanistan (2); Badakhshaner und Kabul-Jalalabader Naturalregionen (3); NO Afghanistan (Badakhshan, Kokcha-Tal, Faizabad, 1,450 m; Kataghan, Bangi-Fluß, Khanabad, 650 m); O Afghanistan (Durufulun bei Kabul, 1,800 m) (4); Faizabad (5); N Afghanistan (Prov. Herat: Balamurghab, 470 m; Wadi-i-Namak-Shor, 400 m) (6).

Untersuchtes Material: Baghlan, 8. VI. 1966 (L. MEDVEDEV, Moskau).

Longitarsus scutellaris (REY, 1874)

L. scutellaris REY, 1874: GRUEV, 1982 (1).

Literaturangaben: Kabul, Aliabad, 1800 m; Hari Rud, 15 km SO Herat, 950 m (1).

Untersuchtes Material: Kabul, 25. VIII. 1966 (L. MEDVEDEV, Moskau).

Longitarsus succineus (FOUDRAS, 1860)

L. succineus FOU DRAS, 1860: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Zentrale Naturalregion (1); Kandahar, Gbargai, 2,000 m; Oruzgan, Herab, 1,300 m (2).

Longitarsus suturalis var. *rubenticollis* (ALLARD, 1860)

L. suturalis rubenticollis ALLARD, 1860: LOPATIN, 1963 (1), 1967a (2); MEDVEDEV, 1983 (3).

L. rubenticollis ALLARD, 1860: MADAR & MADAR, 1969 (4).

Literaturangaben: NO Afghanistan (Badakhshan, Wardudzh-Tal, Tschakaran, 1,850 m); O Afghanistan (Hindukush, Khinjan-Tal, Do-Schak, 2,500 m; Durufulun bei Kabul, 1,800 m; Umgb. Kabul, 1,740 m); S Afghanistan (Kandahar-Kuna, 950 m) (1); Paghman, 30 km NW Kabul, 2,500 m (2); Badakhshaner, Kabul-Jalalabader und Zentrale Naturalregionen (3); N Afghanistan (Prov. Herat: Zarmast-Paß, 2,700 m; Herat, 950 m) (4).

Der taxonomische Status nicht geklärt.

Longitarsus tabidus (FABRICIUS, 1775)

L. tabidus FABRICIUS, 1775: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Umgb. Kabul, 1,740 m) (1); Kabul-Jalalabader Naturalregion (2).

Longitarsus tmetopterus JACOBSON, 1893

L. tmetopterus JACOBSON, 1893: JACOBSON, 1893 (1); CSIKI & HEIKERTINGER, 1940 (2); LOPATIN, 1977 (3).

Literaturangaben: Afghanistan (1, 2, 3).

Longitarsus trepidus WARCHALOWSKI, 1973

L. trepidus WARCHALOWSKI, 1973: GRUEV, 1986 (1).

Literaturangaben: Kabul, 2,000 m (1).

Longitarsus violentus WEISE, 1893

Neu für die Fauna Afghanistans: Nuristan, Waigal-Fluß, VII. 1972, leg. O. KABAKOV (L. MEDVEDEV, Moskau); Kandahar, Ghbargai, X. 1970, leg. O. KABAKOV (L. MEDVEDEV, Moskau); Oruzgan, N Shahrstan, Qonag-Paß, 25. VII. 1970 (L. MEDVEDEV, Moskau). Aedeagus untersucht.

Bekannt aus: Südgebiete des europäischen Teiles der UdSSR, Kaukasus, Turkmenien, Usbekistan, Kirgisien, Kasachstan, Mongolei, Jakutien, Sajangeb., Baikalseegebiet, Daurien, Tuwa, China.

Longitarsus weisei GUILLEBEAU, 1895

L. weisei GUILLEBEAU, 1895: LOPATIN, 1966 (1); MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Umgeb. Kabul) (1); Kabul-Jalalabader Naturalregion (2).

Lupeomorpha klapperichi (LOPATIN, 1962)

Pushiunaltica klapperichi LOPATIN, 1962: LOPATIN, 1962 (1), 1963 (2).

L. klapperichi LOPATIN, 1962: MEDVEDEV, 1983 (3), 1985 (4).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, 1,100 m; Kitau, 1,500 m (1, 2); Nuristaner Naturalregion (3); Afghanistan (4).

Mantura rustica (LINNAEUS, 1766)

M. rustica LINNAEUS, 1766: BECHYNÉ, 1961 (1); KIMOTO, 1966 (2); MADAR & MADAR, 1969 (3); MEDVEDEV, 1983 (4).

M. rustica ab. *suturalis* WEISE, 1886: MADAR & MADAR, 1969 (3).

Literaturangaben: Herat, 970 m (1); Faizabad (2); N Afghanistan (Prov. Herat: Balamurghab, 470 m; Buzba, 800 m) (3); Badakhshaner und Zentrale Naturalregionen (4).

Nonarthra variabilis BALY, 1862

N. variabilis BALY, 1862: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, Purstan, 1,700 m; Kamu) (1); Nuristaner Naturalregion (2).

Novofoudrasia rufiventris (WEISE, 1900)

N. rufiventris WEISE, 1900: LOPATIN, 1966 (1); MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Paghman-Geb., 2,300 m) (1); Zentrale Naturalregion (2).

Orthocrepis ruficollis (LUCAS, 1849)

O. ruficollis LUCAS, 1849: BECHYNÉ, 1961 (1); LOPATIN, 1963 (2), 1982 (3); MADAR & MADAR, 1969 (4); MEDVEDEV, 1983 (5).

Hermaphysa ruficollis LUCAS, 1849: LOPATIN, 1977 (6).

Literaturangaben: Sarobi, 1,100 m (1); NO Afghanistan (Nuristan, Baschgul-Tal, 1,150 m und 1,200 m); S Afghanistan (Kandahar, 950 m) (2, 3); N Afghanistan (Prov. Herat: Buzba, 800 m; Balamurghab, 470 m; Zarmast-Paß, 2,000–2,700 m) (4); Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (5); Afghanistan (6).

Pentamesa duodecimmaculata HAROLD, 1876

P. duodecimmaculata HAROLD, 1876: HEIKERTINGER, 1930 (1).

Literaturangaben: Afghanistan (1).

Die Art war aus Indien und Burma beschrieben worden. Wahrscheinlich ist das *P. kndarensis* LOPATIN, bekannt aus Mittelasien.

Phyllotreta acutecarinata HEIKERTINGER, 1941

P. acutecarinata HEIKERTINGER, 1941: MADAR & MADAR, 1968 (1).

Literaturangaben: N Afghanistan (Prov. Herat: Balamurghab, 470 m) (1). [Fraglich!] (s. MADAR & MADAR, l. c.).

Phyllotreta atra (FABRICIUS, 1775)

P. atra FABRICIUS, 1775: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Umgeb. Kabul, 1,740 m) (1); Kabul-Jalalabader Naturalregion (2).

Untersuchtes Material: Kabul, Aliabad, 1,800 m, 1–2. VI. 1974, leg. L. PAPP (Budapest).

Phyllotreta balcanica HEIKERTINGER, 1909

P. balcanica HEIKERTINGER, 1909: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: S Afghanistan (Kandahar-Kuna, 950 m) (1); Zentrale Naturalregion (2).

Phyllotreta corrugata REICHE, 1858

P. corrugata REICHE, 1858: BECHYNÉ, 1961 (1); MEDVEDEV, 1983 (2).

Literaturangaben: Herat, 970 m (1); Westliche Naturalregion (2).

Phyllotreta cruciferae (GOEZE, 1777)

P. cruciferae GOEZE, 1777: LOPATIN, 1963 (1); KIMOTO, 1966 (2); MEDVEDEV, 1983 (3).

Literaturangaben: NO Afghanistan (Badakhshan, Wardudzh-Tal, Tschakaran, 1,850 m) (1); Badakhshaner Naturalregion (3).

Phyllotreta erysimi WEISE, 1900

P. erysimi WEISE, 1900: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Daracental, Jalalabad, Tangi-Gharuch am Kabul-Fluß, 1,600 m; Durufulun bei Kabul, 1,800 m; Umgeb. Kabul, 1,740 m); Z Afghanistan (Hazaradjat, Band-i-Amir, 2,900 m); S Afghanistan (Kandahar, 950 m) (1); Kabul-Jalalabader und Zentrale Naturalregionen (2).

Untersuchtes Material: Pul-e Charkhi, Kabul, 1,780 m, 19. VI. 1974, leg. L. PAPP

(Budapest); Kabul, Tschelsotun, 1,850 m, 27. V. 1974, leg. L. PAPP (Budapest); Ghazni, 2 km SO Mukur, 1,970 m, 3. VI. 1974, leg. L. PAPP (Budapest); Hari Rud, 15 km SO Herat, 950 m, 21. V. 1974, leg. L. PAPP (Budapest); Kabul, Darulaman, 1,820 m, 18. VI. 1974, leg. L. PAPP (Budapest); Kabul, Aliabad, 13. VI. 1974, leg. L. PAPP (Budapest); Kandahar, 1,000 m, 23. V. 1974, leg. L. PAPP (Budapest); Kabul, 1,800 m, 2-19. VI. 1986, leg. P. BERON (Sofia).

Phyllotreta latevittata KUTSCHERA, 1860

P. latevittata KUTSCHERA, 1860: LOPATIN, 1967a (1); MADAR & MADAR, 1968 (2); MEDVEDEV, 1983 (3).

Literaturangaben: Kabul (1); N Afghanistan (Prov. Herat: Buzba, 800 m) (2); Kabul-Jalalabader und Zentrale Naturalregionen (3).

Phyllotreta nigripes (FABRICIUS, 1775)

P. nigripes FABRICIUS, 1775: GRUEV, 1982 (1).

Literaturangaben: Kabul, Aliabad, 1,800 m (1).

Phyllotreta pallidipennis REITTER, 1891

P. turcmenica WEISE, 1900: MADAR & MADAR, 1968 (1).

P. pallidipennis REITTER, 1891: MEDVEDEV, 1983 (2), 1985(3).

Literaturangaben: N Afghanistan (Prov. Herat: Balamurghab, 470 m; Murichaq, 400 m) (1); Kabul-Jalalabader Naturalregion (2); Kabul, 1,800 m (3).

Phyllotreta paradoxa LOPATIN, 1956

P. paradoxa LOPATIN, 1956: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Kabul-Jalalabader Naturalregion (1); Kabul, 1,800 m (2).

Phyllotreta praticola WEISE, 1887

P. praticola WEISE, 1887: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, 1,100 m); Z Afghanistan (Nazaradjat, Band-i-Amir, 1,900 m) (1); Nuristaner und Zentrale Naturalregionen (2).

Phyllotreta stehliki MADAR et MADAR, 1968

P. stehliki MADAR et MADAR, 1968: MADAR & MADAR, 1968 (1).

Literaturangaben: O Afghanistan (Prov. Nangarhar: Jalalabad, 560-800 m) (1).

Phyllotreta thalassicola HEIKERTINGER, 1944

P. thalassicola HEIKERTINGER, 1944: LOPATIN, 1963 (1); KIMOTO, 1966 (2); MEDVEDEV, 1983 (3).

Literaturangaben: NO Afghanistan (Badakhshan, Wardudzh-Tal, Tschakaran, 1,850 m; Sarekanda-Geb., 3,500 m; Kokcha-Tal, Faizabad, 1,450 m; Nuristan, Baschgul-Tal, 1,100 m); O Afghanistan (Umgb. Kabul, 1,740 m; Paghman-Geb., 2,000 m) (1); Kabul (2); Badakhshaner, Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (3).

Phyllotreta vittula (REDTENBACHER, 1849)

P. vittula REDTENBACHER, 1849: LOPATIN, 1963 (1); MADAR & MADAR, 1968 (2);

MEDVEDEV, 1983 (3).

Literaturangaben; NO Afghanistan (Badakhshan, Wardudzh-Tal, Tschakaran, 1,850 m) (1); N Afghanistan (Prov. Herat: Balamurghab, 470 m) (2); Badakhshaner Naturalregion (3).

Psylliodes persica ALLARD, 1866

P. persica ALLARD, 1866: BECHYNÉ, 1961 (1); LOPATIN, 1963 (2); MADAR & MADAR, 1969 (3); MEDVEDEV, 1983 (4).

Literaturangaben: Shibarghan, 400 m (1); NO Afghanistan (Badakhshan, Wardudzh-Tal, Tschakaran, 1,850 m; Nuristan, Baschgul-Tal, 1,150 m); O Afghanistan (Kunar-Tal, Jalalabad, Kuna, 950 m) (2); O Afghanistan (Prov. Nangarhar, Jalalabad, 560–580 m; Nemla, 900 m; Shigi, 580 m; Darunta, 950 m; Abdukul, 600 m) (3); Nordliche, Nordwestliche, Badakhshaner, Nuristaner, Zentrale und Kabul-Jalalabader Naturalregionen (4).

Untersuchtes Material: Nangarhar, Jalalabad, 560 m, 17. IV. 1974, leg. L. PAPP (Budapest). Aedeagus untersucht.

Psylliodes sophiae HEIKERTINGER, 1914

P. cyanoptera ILLIGER, 1807: LOPATIN, 1963 (1); MEDVEDEV, 1983 (2).

P. sophiae HEIKERTINGER, 1914: HEIKERTINGER, 1930 (3); MADAR & MADAR, 1969 (4); LOPATIN, 1977 (5); MEDVEDEV, 1985 (6).

Literaturangaben: NO Afghanistan (Badakhshan, Sarekanda-Geb., 2,800 m; Nuristan, Baschgul-Tal, 1,200 m); O Afghanistan (Umgeb. Kabul, 1,740 m) (1); Badakhshaner, Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (2); N Afghanistan (Prov. Herat: Akaza-i, 520 m) (4); Afghanistan (3, 5); Herat, Singilan; Oruzgan, Shahrstan, 2,200 m (6).

Unterfamilie **Hispinae**

Agonita klapperichi UHMANN, 1954

A. klapperichi UHMANN, 1954: UHMANN, 1954 (1); MEDVEDEV, 1983 (2), 1985 (3).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, Kamu, 1,500 m) (1); Nuristaner und Kabul-Jalalabader Naturalregionen (2); Kabul (Kotale Herir Hana, 2,100 m) (3).

Asamangulia cuspidata MAULIK, 1915

A. dreesi UHMANN, 1954: UHMANN, 1954 (1); MEDVEDEV, 1983 (3).

A. cuspidata MAULIK, 1915: WÜRMLI, 1976 (2); MEDVEDEV, 1983 (3), 1985 (4).

Literaturangaben: NO Afghanistan (Nuristan, Baschgul-Tal, Kamu, 1,100 m); O Afghanistan (Kunar-Tal, Jalalabad, 500 m); S Afghanistan (Kandahar-Kuna, 950 m) (1); NO Afghanistan (Baschgul-Tal) (2); Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (3); Nuristan, Kamdesh, 1,500 m; Chapadara, 1,600 m (4).

Dactylispa dilaticornis (DUVIVIER, 1891)

D. dilaticornis DUVIVIER, 1891: WÜRMLI, 1976a (1).

Literaturangaben: Jalalabad (1).

Dactylispa pusilla WEISE, 1905

D. pusilla WEISE, 1905: UHMANN, 1954 (1); MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Kunar-Tal, Jalalabad) (1); Kabul-Jalalabader Naturalregion (2).

Hispa atra LINNAEUS, 1767

H. atra LINNAEUS, 1767: UHMANN, 1954 (1); LOPATIN, 1967 (2); WÜRMLI, 1976b (3); MEDVEDEV, 1983 (4), 1985 (5).

Literaturangaben: NO Afghanistan (Badakhshan, Faizabad, Sarekanda-Geb.); O Afghanistan (Kabul) (1); Z Afghanistan (Prov. Kabul: Kabul) (2); Afghanistan (3); Badakhshaner, Kabul-Jalalabader und Zentrale Naturalregionen (4); Kabul, 1,800 m; Badakhshan, Ischkaschim, 2,600 m; Ghor, Sahar, 2,600 m (5).

Hispa ramosa GYLLENHAL, 1817

H. ramosa GYLLENHAL, 1817: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Nuristaner Naturalregion (1); Nuristan, Waigal-Fluß, 2,500 m (2).

Unterfamilie Cassidinae

Cassida (Onychocassis) brevis WEISE, 1884

C. brevis WEISE, 1884: LOPATIN, 1966 (1), 1967 (2); MEDVEDEV, 1983 (3), 1985 (4).

Literaturangaben: Z Afghanistan (Band-i-Amir, Hazaradjat, 2,900 m) (1); N Afghanistan (Prov. Herat, 950 m; Zarmast, 2,300 m) (2); Zentrale und Ostliche Naturalregionen (3); Bamiyan, Bahsus, 2,800 m und Gardan Dival, 3,000 m; Ghor, Tulak, 2,500 m; Maidan, Tokana, 2,700 m; Ghazni, Mukur, 2,500 m; Oruzgan, Kakeran, 2,000 m und Shahrstan, 2,200 m (4).

Cassida (Lordicassis) medvedevi LOPATIN, 1965

C. medvedevi LOPATIN, 1965: LOPATIN, 1977 (1).

Literaturangaben: Badakhshan (1).

Cassida (s. str.) *palaestina* REICHE, 1858

C. palaestina REICHE, 1858: LOPATIN, 1966 (1); MEDVEDEV, 1983 (2).

Literaturangaben: NO Afghanistan (Badakhshan, Kokcha-Tal, Kalasau, 2,000 m) (1); Badakhshaner Naturalregion (2).

Cassida (s. str.) *spaethi* WEISE, 1900

C. spaethi WEISE, 1900: JAKOB, 1962 (1).

Literaturangaben: NW Afganistan (Herat) (1). [Fraglich!] (s. LOPATIN, 1963).

Cassida (s. str.) *stigmatica* SUFFRIAN, 1844

C. stigmatica SUFFRIAN, 1844: MEDVEDEV, 1983 (1).

Literaturangaben: Zentrale Naturalregion (1).

Cassida (Hypocassida) subferruginea SCHRANK, 1776

Hypocassida subferruginea SCHRANK, 1776: LOPATIN, 1966 (1), 1967 (2), 1982 (3); MEDVEDEV, 1983 (4), 1985 (5).

Literaturangaben: O Afghanistan (Hindukush, Walang, Salang-Tal, 2,550 m) (1); NO Afghanistan (Badakhshan, Schiva-See, Hochsteppe, 2,800 m) (2); N Afghanistan (Prov. Herat: Buzba, 800 m) (3); Badakhshaner, Westliche, Kabul-Jalalabader und Zentrale Naturalregionen (4); Badakhshan, Pan-Fluß, Samti, 1,800 m (5).

Cassida (Tylocentra) turcmunica WEISE, 1892

C. turcmunica WEISE, 1892: LOPATIN, 1966 (1); MEDVEDEV, 1983 (2).

Literaturangaben: O Afghanistan (Tangi-Saidan bei Kabul, 1,750 m) (1); Kabul-Jalalabader Naturalregion (2).

Cassida (Lordicassis) undecimnotata GEBLER, 1833

C. undecimnotata GEBLER, 1833: LOPATIN, 1967 (1); MEDVEDEV, 1983 (2), 1985 (3).

Literaturangaben: N Afghanistan (Prov. Herat: Balamurghab, 470 m; Zarmast, 2,000–2,500 m; Prov. Kataghan: Kunduz, 400 m) (1); Badakhshaner, Nuristaner, Kabul-Jalalabader und Zentrale Naturalregionen (2); 15 km NO Kabul, 2,000 m; Baghlan: Shashan-Geb., 2,200–2,800 m; Nuristan, Waigal-Fluß, 2,100 m; Chapadara, 1,800 m (3).

Chiridula semenovi WEISE, 1889

C. semenovi WEISE, 1889: LOPATIN, 1966 (1); MEDVEDEV, 1983 (2), 1985 (3).

Literaturangaben: NO Afghanistan (Badakhshan, Wardudzh-Tal, Barak, 1,650 m; Nuristan, Baschgul-Tal, 1,100 m) (1); Badakhshaner, Nuristaner und Zentrale Naturalregionen (2); Nuristan: Pech, 1,100 m; S von Chapadara, 1,400 m; Bamiyan, Bahsud, 3,000 m; Kunar, W von Barikota, 2,100 m; Chapadara, 1,800 m (3).

Ischyronota desertorum (GEBLER, 1833)

I. desertorum GEBLER, 1833: MEDVEDEV, 1983 (1), 1985 (2).

Literaturangaben: Nordliche und Nordwestliche Naturalregionen (1); Herat, Paropamisus (2).

Macromonycha apicalis (GEBLER, 1845)

M. apicalis GEBLER, 1845: LOPATIN, 1967 (1); MEDVEDEV, 1983 (2), 1985 (3).

Literaturangaben: N Afghanistan (Prov. Herat: Balamurghab, 450 m) (1); Westliche, Kabul-Jalalabader und Zentrale Naturalregionen (2); Kabul, 1,800 m (3).

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A Study on the Electron Microscopic Comparison of the Elytra of Cerambycidae (Coleoptera). Part III.

By SHU TAMURA and TAMOTSU TAMURA

Abstract We examined the elytra of the remaining subfamily Lamiinae of Cerambycidae by scanning electron microscope. We consider that Lamiinae exhibits the greatest diversity in surface structure within Cerambycidae and shows two characteristic features; the first being abruptly terminated hairs on the elytra in some species of the tribes Agniini, Apomecynini and Pteropliini, the second being bulb-shaped hairs on various colored elytra in two species of the genus *Olenecamptus* and several species of the tribe Saperdini.

To summarize this study, we find each species possesses a distinctive surface structure and that it is also possible to microscopically distinguish between species with mutual similarities by significant and reproducible differences.

Our previous two reports showed the micrographical characteristics among eight subfamilies of Cerambycidae. On this paper we examine the elytra of the remaining subfamily Lamiinae and refer to the relationships of the nine subfamilies based on elytral ultrastructures.

Materials and methods

As shown in Table 1, 44 species (17 tribes) of Lamiinae were used for this report. The procedures and equipment used were the same as those previously described. Especially, in this paper we examined two or more materials in nearly all species and observed various colored elytra as well as their bases in some species.

Table 1. Examined species of the subfamily Lamiinae of Cerambycidae and the sites of collection.

Lamiinae	
Dorcadionini	
<i>Dorcadion aethiops</i> SCOPOLI	Czechoslovakia
<i>Dorcadion pedestre</i> PODA	Czechoslovakia
Mesosini	
<i>Mesosa japonica</i> BATES	Osaka, Japan

<i>Mesosa senilis</i> BATES	Nara, Japan
Morimopsini	
<i>Plectrura metallica</i> BATES	Niigata, Japan
<i>Dolophrades terrenus</i> BATES	Ehime, Japan
Phrissomini	
<i>Parechthistatus gibber</i> (BATES)	Osaka, Japan
<i>Parechthistatus grossus</i> (BATES)	Kumamoto, Japan
Agniini	
<i>Lamia textor</i> (LINNÉ)	Hokkaido, Japan
<i>Monochamus sartor</i> (FABRICIUS)	Czechoslovakia
<i>Monochamus nitens</i> BATES	Gumma, Japan
<i>Acalolepta sejuncta</i> (BATES)	Kochi, Japan
Batocerini	
<i>Batocera lineolata</i> CHEVROLAT	Osaka, Japan
<i>Apriona japonica</i> THOMSON	Hyogo, Japan
Dorcaschematini	
<i>Olenecamptus cretaceus</i> BATES	Nagano, Japan
<i>Olenecamptus clarus</i> PASCOE	Saga, Japan
Xenoleini	
<i>Xenolea asiatica</i> (PIC)	Ishigaki Is., Japan
Pogonocherini	
<i>Eupogonocherus hispidulus</i> (PILLER)	Czechoslovakia
Rhodopinini	
<i>Rhodopina lewisii</i> (BATES)	Nara, Japan
Pteropliini	
<i>Pterolophia kubokii</i> HAYASHI	Yonakuni Is., Japan
<i>Pterolophia zonata</i> (BATES)	Saga, Japan
<i>Pterolophia annulata</i> (CHEVROLAT)	Osaka, Japan
<i>Pterolophia caudata</i> (BATES)	Nara, Japan
<i>Pterolophia japonica</i> BREUNING	Nara, Japan
Apomecynini	
<i>Apomecyna naevia</i> BATES	Yaku Is., Japan
<i>Asaperda rufipes</i> BATES	Nara, Japan
<i>Sybra ordinata</i> BATES	Kagoshima, Japan
<i>Ropica formosana</i> (BATES)	Yaku Is., Japan
<i>Ropica dorsalis</i> SCHWARZER	Iriomote Is., Japan
Acanthocinini	
<i>Acanthocinus griceus</i> FABRICIUS	Wakayama, Japan
<i>Leiopus stillatus</i> BATES	Nagano, Japan
Acanthoderini	
<i>Acanthoderes clavipes</i> SCHRANK	Czechoslovakia
Agapanthiini	
<i>Agapanthia japonica</i> KANO	Nagano, Japan
<i>Agapanthia leucaspis</i> STEVEN	Bulgaria
<i>Agapanthia violacea</i> (FABRICIUS)	Bulgaria
Tetraopini	

<i>Tetrops praeusta</i> (LINNÉ)	Czechoslovakia
Saperdini	
<i>Saperda octopunctata</i> (SCOPOLI)	Czechoslovakia
<i>Eutetrappa ocelota</i> BATES	Gumma, Japan
<i>Eutetrappa chrysochloris</i> (BATES)	Gumma, Japan
<i>Paramenesia kasugensis</i> (SEKI et KOBAYASHI)	Nara, Japan
<i>Pareutetrappa simulans</i> (BATES)	Gumma, Japan
<i>Stenostola ferrea</i> (SCHRANK)	Czechoslovakia
<i>Opsilia coerulescens</i> (SCOPOLI)	Bulgaria
<i>Oberea hebesceus</i> BATES	Nara, Japan

Classification according to VILLIERS (1978) and HAYASHI (1984).

Results

Dorcadion aethiops (Fig. 1): scattered hairs (70–100 μ) and shallow holes on the punctured surface, each hole with a hair.

Dorcadion pedestre (Fig. 2): nearly the same as in Fig. 1.

Mesosa japonica (Fig. 3): dense and short hairs (80–90 μ) and round holes (70–100 μ in diameter), each hole with a hair from protrusion at basal side.

Mesosa senilis (Fig. 4): short hairs (80–90 μ) and round holes (approximately 50 μ in diameter), each hole without a hair.

Plectrura metallica (Figs. 5, 6): sparse and partially dense hairs (80–130 μ) on the uneven surface.

Dolophrades terrenus (Figs. 7, 8): short hairs (50–60 μ) and almost round holes (approximately 40 μ in diameter), each hole with a hair.

Parechthistatus gibber (Fig. 9): short and wide hairs (40–50 μ) on the deeply grooved surface.

Parechthistatus grossus (Fig. 10): slender hairs (70–80 μ) on the deeply grooved surface.

Lamia textor (Figs. 11, 12): abruptly terminated hairs (50–60 μ) and round protrusions.

Monochamus sartor (Fig. 13): sparse and partially very dense hairs (180–220 μ).

Monochamus nitens (Fig. 14): nearly the same as in Fig. 13.

Acalolepta sejuncta (Fig. 15): slender hairs (70–80 μ) and each small hole with a longer hair.

Batocera lineolata (Figs. 16, 17): oval protrusions (350×500 μ) and dense hairs (110–120 μ).

Apriona japonica (Fig. 18): almost oval protrusions and slender hairs (140–160 μ).

Olenecamptus cretaceus (Figs. 19, 20): bulb-shaped hairs (80–100 μ) at white colored region and short hairs (50–60 μ) and oval holes, each hole with a hair at brown region.

Olenecamptus clarus (Figs. 21, 22): nearly the same findings as in Figs. 19, 20 both at white colored and brown region.

Xenolea asiatica (Fig. 23): dense hairs (approximately 80 μ) and very small holes, each hole with a longer hair.

Eupogonocherus hispidulus (Fig. 24): slender hairs (70–80 μ) and round holes (approximately 40 μ in diameter), each hole without a hair.

Rhodopina lewisii (Fig. 25): short hairs (40–60 μ) and irregularly oval holes (20 $\times$ 50 μ in diameter), each hole with a longer hair (80–100 μ).

Pterolophia kubokii (Figs. 26, 27): densely, abruptly terminated hairs (60–90 μ) and almost round holes (50–60 μ in diameter).

Pterolophia zonata (Fig. 28): abruptly terminated hairs (approximately 60 μ) and round holes (approximately 30 μ in diameter).

Pterolophia annulata (Fig. 29): abruptly terminated hairs (approximately 40 μ).

Pterolophia caudata (Fig. 30): abruptly terminated hairs (40–60 μ) and oval holes (60 $\times$ 100 μ in diameter).

Pterolophia japonica (Fig. 31): thinly, abruptly terminated hairs (60–80 μ) and almost round holes (approximately 30 μ in diameter).

Apomecyna naevia (Fig. 32): wide and abruptly terminated hairs (40–50 μ) and almost round holes (approximately 70 μ in diameter), each hole containing a hair.

Asaperda rufipes (Fig. 33): slender hairs (70–90 μ) and shallow and small holes, each hole with a slender hair.

Sybra ordinata (Fig. 34): short hairs (70–90 μ) and round holes (approximately 30 μ in diameter), each hole with a hair.

Ropica formosana (Fig. 35): abruptly terminated hairs (40–50 μ) and each oval hole (20 $\times$ 30 μ in diameter) without a hair.

Ropica dorsalis (Fig. 36): non-abruptly terminated hairs (40–50 μ) and each oval hole (10 $\times$ 30 μ) without a hair.

Acanthocinus griceus (Fig. 37): wide hairs (approximately 40 μ) and oval holes (10 $\times$ 40 μ in diameter), each hole without a hair.

Leiopus stillatus (Fig. 38): slender hairs (70–80 μ) and extremely oval holes (5 $\times$ 30 μ in diameter).

Acanthoderes clavipes (Fig. 39): slender hairs (70–80 μ) and each almost round hole (approximately 80 μ in diameter) with a hair from protrusion at basal side.

Agapanthia japonica (Fig. 40): each round hole (approximately 60 μ in diameter) with a long hair (200–300 μ).

Agapanthia leucaspis (Fig. 41): each oval hole (20 $\times$ 30 μ in diameter) with a short hair (50–80 μ).

Agapanthia violacea (Fig. 42): each oval hole (20 $\times$ 30 μ in diameter) with a slender hair (100–130 μ).

Tetrops praeusta (Fig. 43): each small hole with a slender hair (150–180 μ).

Saperda octopunctata (Figs. 44, 45): bulb-shaped hairs (approximately 80 μ) and round holes (approximately 50 μ in diameter), each hole with a very long hair (250–400 μ).

Eutetrappa ocelota (Fig. 46): thinly bulb-shaped hairs (70–80 μ) and round holes (approximately 30 μ in diameter), each hole with a long hair.

Eutetrappa chrysochloris (Figs. 47, 48): bulb-shaped hairs (approximately 80 μ) at iridescent green region and short hairs (60–70 μ) at non-iridescent black region, each round hole (40–50 μ in diameter) with a long hair.

Paramenesia kasugensis (Figs. 49, 50): thinly bulb-shaped hairs (approximately 100 μ) at yellow patches and short hairs (50–60 μ) at brown region, each round hole

(approximately 30 μ in diameter) with a long hair.

Pareutetrapha simulans (Fig. 51): short hairs (40–60 μ) and each round hole (approximately 30 μ in diameter) with a long hair.

Stenostola ferrea (Fig. 52): short hairs (70–80 μ) and round holes (approximately 30 μ in diameter), each hole with a hair (120–140 μ).

Opsilia coerulescens (Fig. 53): short hairs (70–90 μ) and round holes (approximately 30 μ in diameter), each hole with a hair (80–200 μ).

Oberea hebesceus (Fig. 54): short hairs (approximately 100 μ) and guitar-shaped holes (70 $\times$ 90 μ in diameter), each hole with a longer hair (170–180 μ).

Discussion

We examined species belonging to 17 tribes of the subfamily Lamiinae that contained a large number of species and had been differentiated to various species according to BREUNING (1958–69).

We observed no significant differences among materials of the same species examined regarding nearly all species in this report and several species in Part II. There are only a few differences between two species in the tribe Dorcadionini, however, we find no similarities among species examined in the tribes Mesosini, Morimopsini, Batocerini, Apomecynini and Acanthocinini, respectively.

In the tribe Phrissomini *Parechthistatus gibber* and *P. grossus* incapable of flight were divided into some subspecies according to HAYASHI (1984). MIYAKE (1980) classified the latter species as the former one and KUSAMA et al. (1984) also follow this view. We find *P. gibber* distinctively differs from *P. grossus* as to the hairs on the elytra, comparing them microscopically. Since we suggested in Part II that some significant and reproducible differences among species with mutual resemblances could separate independent species proper to each, we investigated whether both species had each proper surface structure. We examined some of the other specimens of these species collected from the vicinity of each type locality. Our observations reveal that there are significant differences proper to each of them, suggesting that *P. gibber* and *P. grossus* are each independent species. Further microscopic study is needed to investigate the subspecies level of these species.

In the tribe Agniini *Monochamus sartor* and *M. nitens* resemble each other and they are also similar to *Plectrura metallica* in Morimopsini. As noted in Part II, similar findings are occasionally observed between different tribes or subfamilies.

Five species of the genus *Pterolophia* show abruptly terminated hairs and *Lamia textor* in Agniini and one of the two species of the genus *Ropica* also exhibit these characteristics, although the hairs do not resemble each other. These findings cannot be found in another subfamilies in so far as our observations and may be one of the characteristics of Lamiinae.

Although we examined only one species in each of the tribes Xenoleini, Pogonocherini, Rhodopinini, Acanthoderini and Tetraopini, respectively, we find various appearances and dissimilarities, compared with each other.

Bulb-shaped hairs can be observed at white patches on the elytra of two species of the genus *Olenecamptus* in Dorcaschematini and iridescent or non-iridescent green and yellow region of the elytra of the genera *Saperda*, *Eutetrapha* and *Paramenesia*

in Saperdini, although dark yellowish patches on the elytra of *Plectrura metallica* and two species of *Monochamus* show merely a group of slender hairs.

In general, we consider that Lamiinae exhibits greater diversity in surface structure than Cerambycinae. LINSLEY (1961) represented the phylogenetic relationships of subfamilies of Cerambycidae with respect to adult structures, wing structures, larval structures and all structures, and VILLIERS (1978) also designated their relationships. From the evidence found in this study, we propose some new slightly different relationships based on elytral ultrastructures (See Text fig. 1). Namely, Prioninae is similar to Parandrinae and Aseminae rather resembles Lepturinae. As mentioned by VILLIERS (1978), the present classification is mainly based on the study of species in Europe and North America. So it may be possible to alter the classification system of the higher categories of Cerambycidae in the progression of the study of species in tropical regions.

Ours is the first study to attempt use of micrographical characteristics of the elytra in classification. In conclusion, each species possesses a distinctive surface structure. Even though we find no significant differences in surface structure among several species, we cannot regard them as the same species; on the contrary, we can microscopically distinguish one species from another among species with mutual resemblances by their significant and reproducible differences.

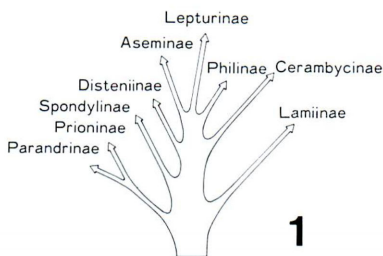


Fig. 1. Schematic representation of phylogenetic relationships of the nine subfamilies of Cerambycidae based on elytral ultrastructures.

Acknowledgements

We are grateful to Dr. MASAO HAYASHI, Osaka Jonan Women's Junior College, for his valuable suggestions and also thank Mr. EIJI TSUJI, Osaka Prefectural Industrial Technology Research Institute, for his excellent technical assistance.

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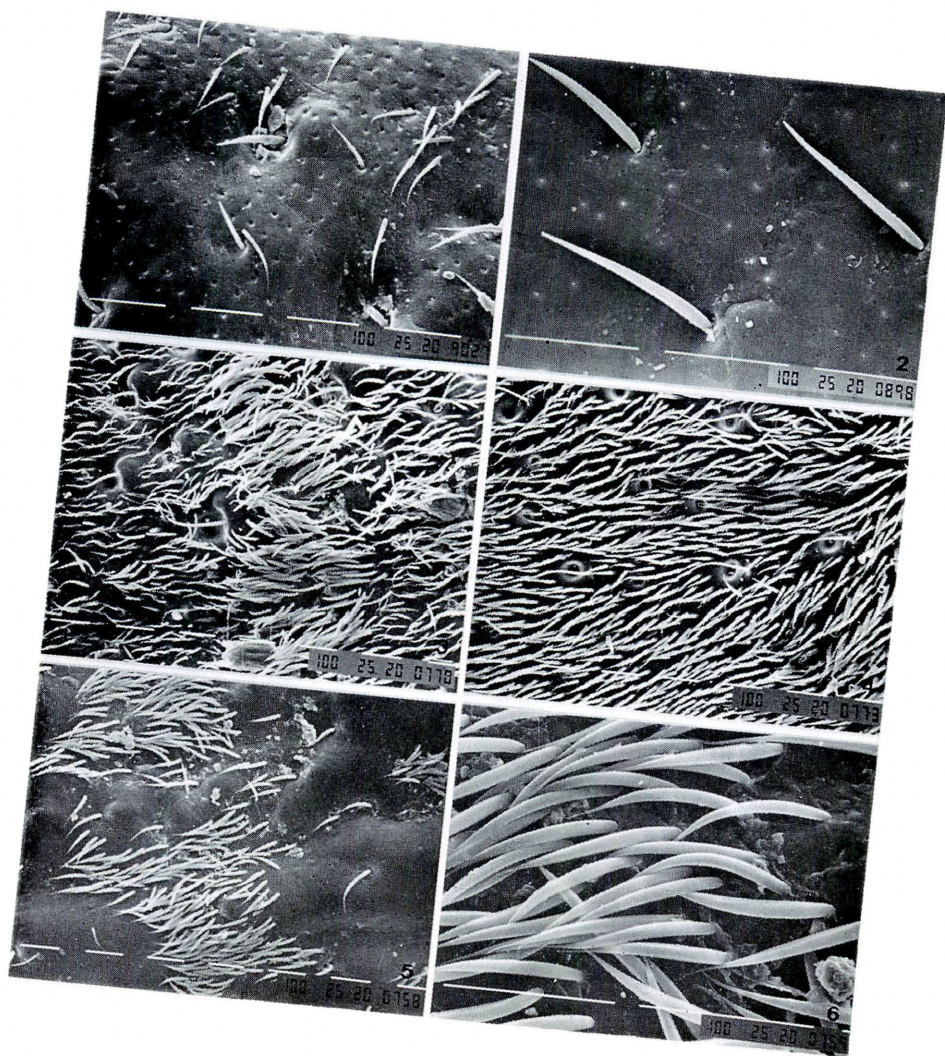
VILLIERS, A., 1978; Fauna des Coléoptères de France, I Cerambycidae. Lechevalier, Paris.

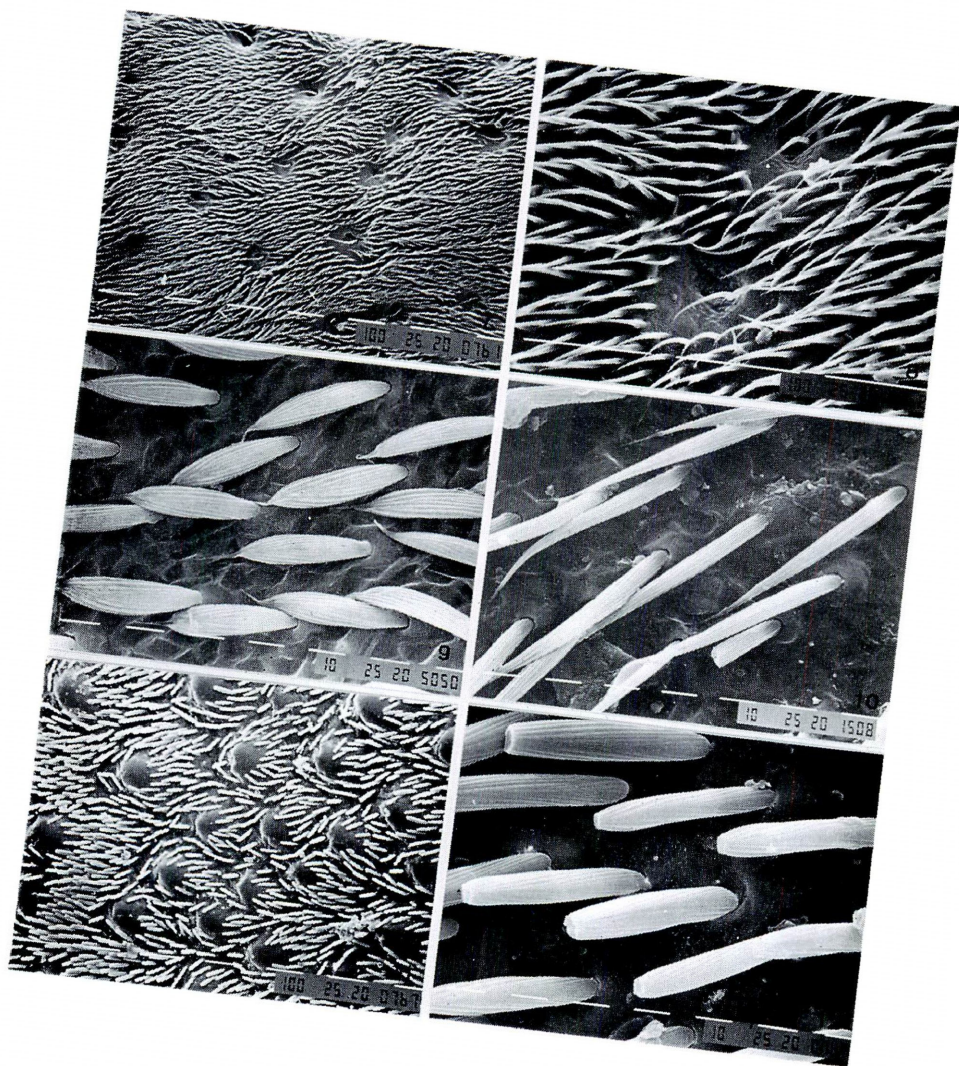
Explanation of Plates 11-19

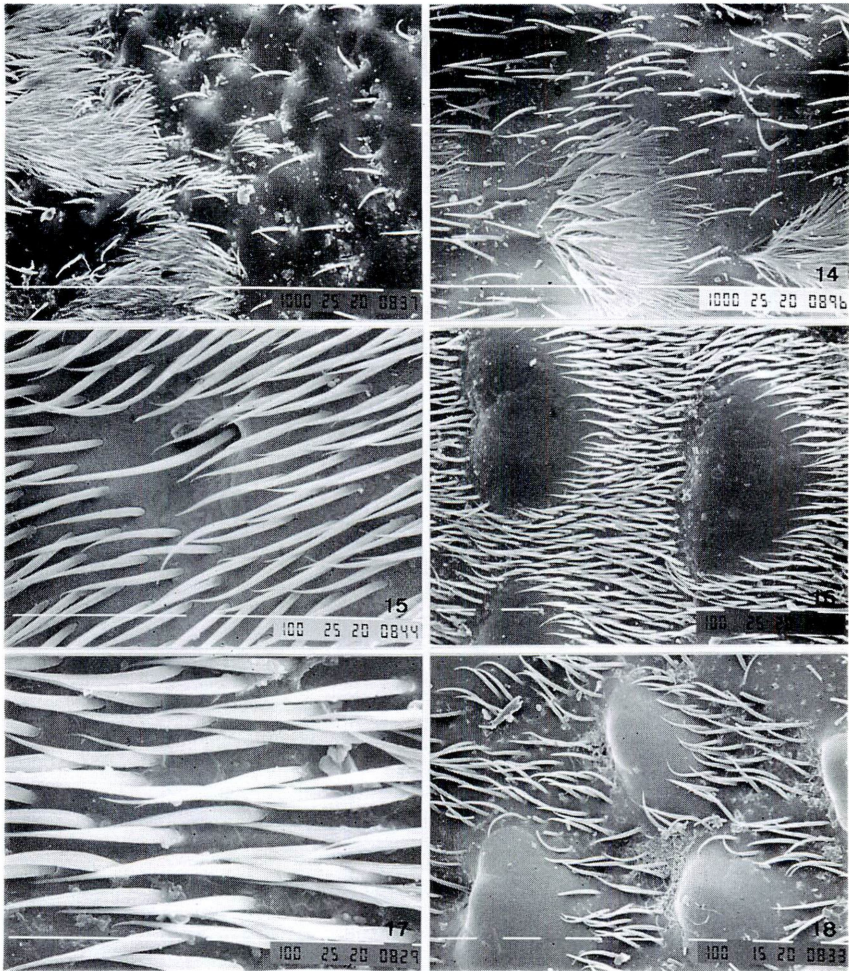
- Pl. 11, Fig. 1 *Dorcadion aethiops*, $\times 200$.
 2 *Dorcadion pedestre*, $\times 350$.
 3 *Mesosa japonica*, $\times 100$.
 4 *Mesosa senilis*, $\times 100$.
 5 *Plectrura metallica*, $\times 100$.
 6 Ditto, $\times 500$.
- Pl. 12, Fig. 7 *Dolophrades terrenus*, $\times 100$.
 8 Ditto, $\times 500$.
 9 *Parechthistatus gibber*, $\times 1,000$.
 10 *Parechthistatus grossus*, $\times 1,000$.
 11 *Lamia textor*, $\times 100$.
 12 Ditto, $\times 1,000$.
- Pl. 13, Fig. 13 *Monochamus sartor*, $\times 50$.
 14 *Monochamus nitens*, $\times 50$.
 15 *Acalolepta sejuncta*, $\times 500$.
 16 *Batocera lineolata*, $\times 100$.
 17 Ditto, $\times 500$.
 18 *Apriona japonica*, $\times 100$.
- Pl. 14, Fig. 19 *Olenecamptus cretaceus*, $\times 100$.
 20 Ditto, $\times 500$.
 21 *Olenecamptus clarus*, $\times 100$.
 22 Ditto, $\times 500$.
 23 *Xenolea asiatica*, $\times 500$.
 24 *Eupogonocherus hispidulus*, $\times 500$.
- Pl. 15, Fig. 25 *Rhodopina lewisii*, $\times 350$.
 26 *Pterolophia kubokii*, $\times 100$.
 27 Ditto, $\times 500$.
 28 *Pterolophia zonata*, $\times 500$.
 29 *Pterolophia annulata*, $\times 1,000$.
 30 *Pterolophia caudata*, $\times 350$.
- Pl. 16, Fig. 31 *Pterolophia japonica*, $\times 500$.
 32 *Apomecyna naevia*, $\times 500$.
 33 *Asaperda rufipes*, $\times 500$.
 34 *Sybra ordinata*, $\times 350$.
 35 *Ropica formosana*, $\times 1,000$.
 36 *Ropica dorsalis*, $\times 1,000$.
- Pl. 17, Fig. 37 *Acanthocinus griceus*, $\times 500$.

- 38 *Leioptus stillatus*, $\times 350$.
 39 *Acanthoides clavipes*, $\times 500$.
 40 *Agapanthia japonica*, $\times 100$.
 41 *Agapanthia leucaspis*, $\times 500$.
 42 *Agapanthia violacea*, $\times 500$.
 Pl. 18, Fig. 43 *Tetrops praxus*, $\times 350$.
 44 *Saperda octopunctata*, $\times 100$.
 45 Ditto, $\times 500$.
 46 *Eutetrappa cecilia*, $\times 350$.
 47 *Eutetrappa chrysichloris*, $\times 100$.
 48 Ditto, $\times 500$.
 Pl. 19, Fig. 49 *Paranenzia kasugensis*, $\times 100$.
 50 Ditto, $\times 500$.
 51 *Pareutetrappa simulans*, $\times 500$.
 52 *Stenostola ferrea*, $\times 350$.
 53 *Opsilia coerulescens*, $\times 350$.
 54 *Oberea hebeszens*, $\times 100$.

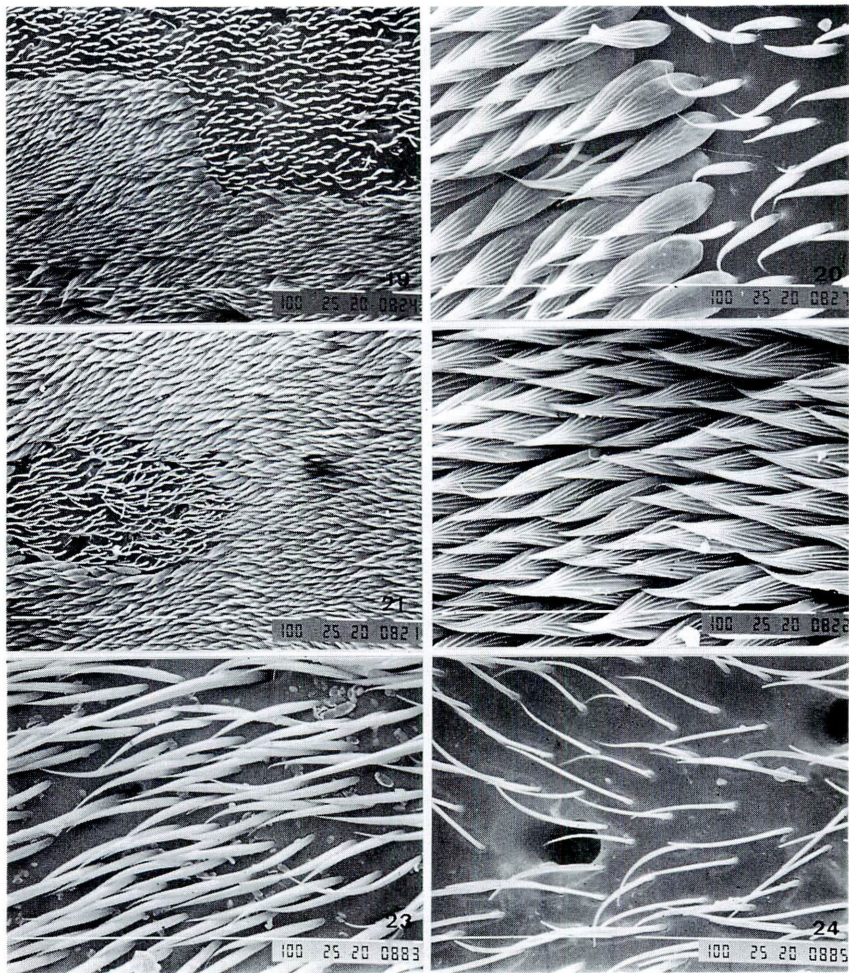
Scale: Each white line is equal to $1,000 \mu$ at an original magnification of $\times 50$, 100μ at of $\times 100$, $\times 200$, $\times 350$ or $\times 500$, and 10μ at of $\times 1,000$.

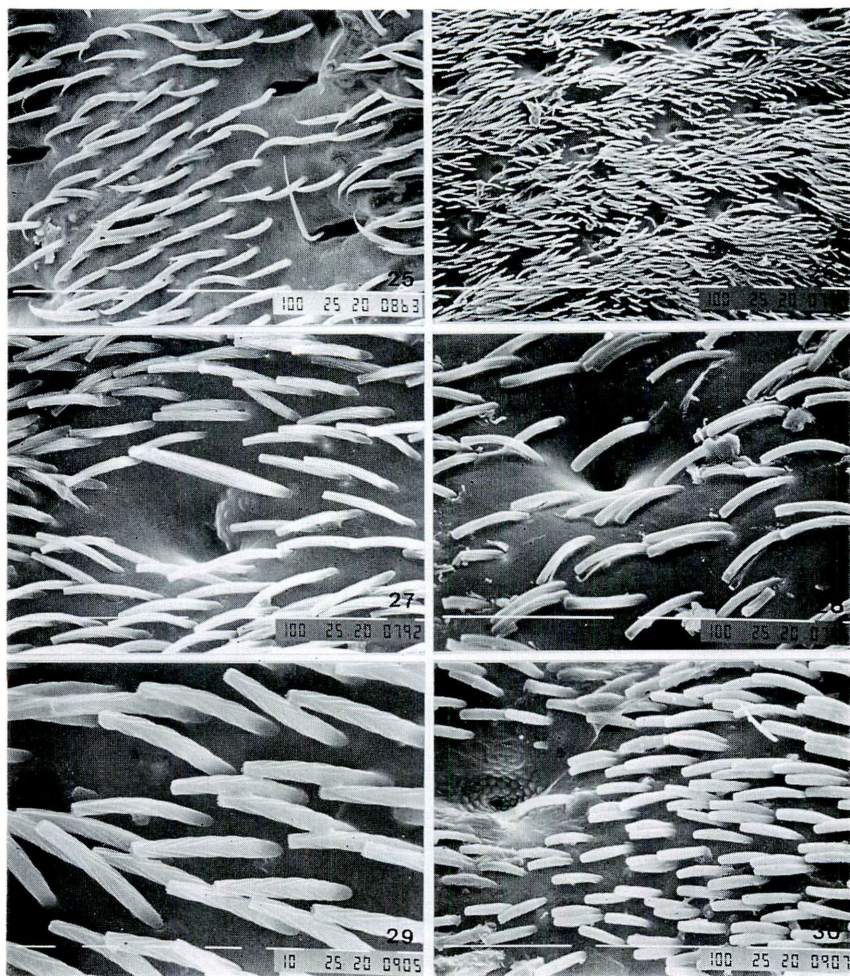


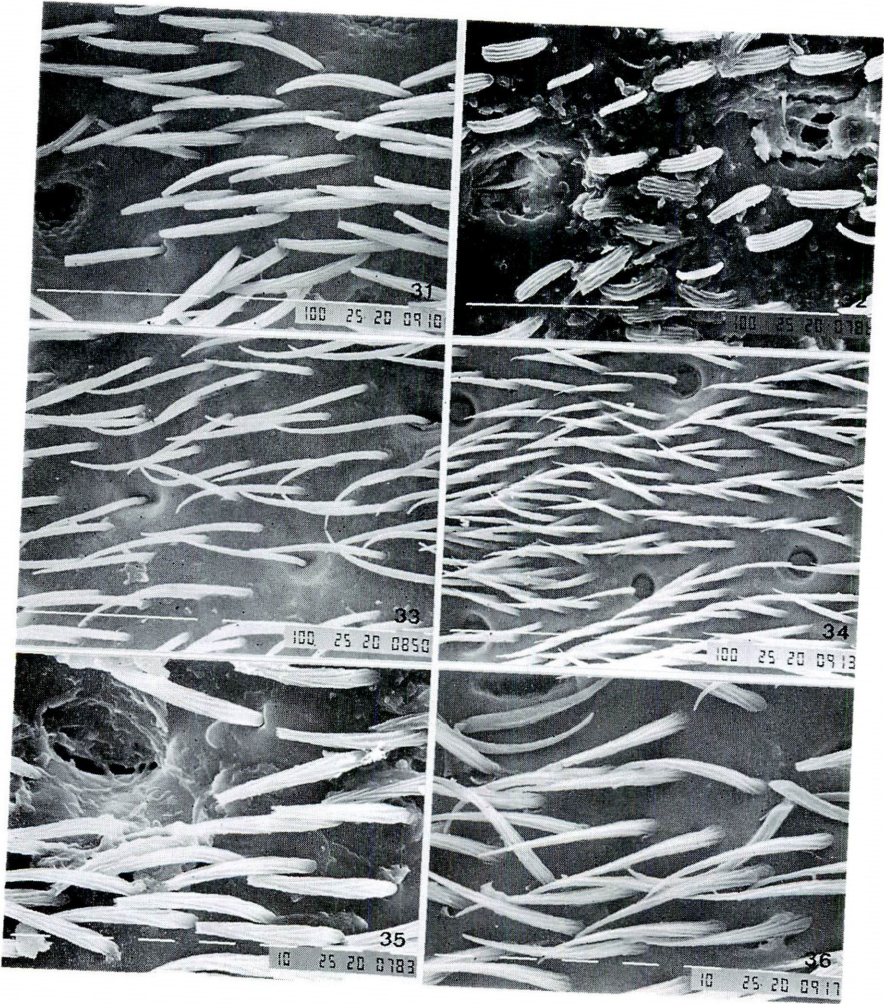




(S. & T. TAMURA photo.)

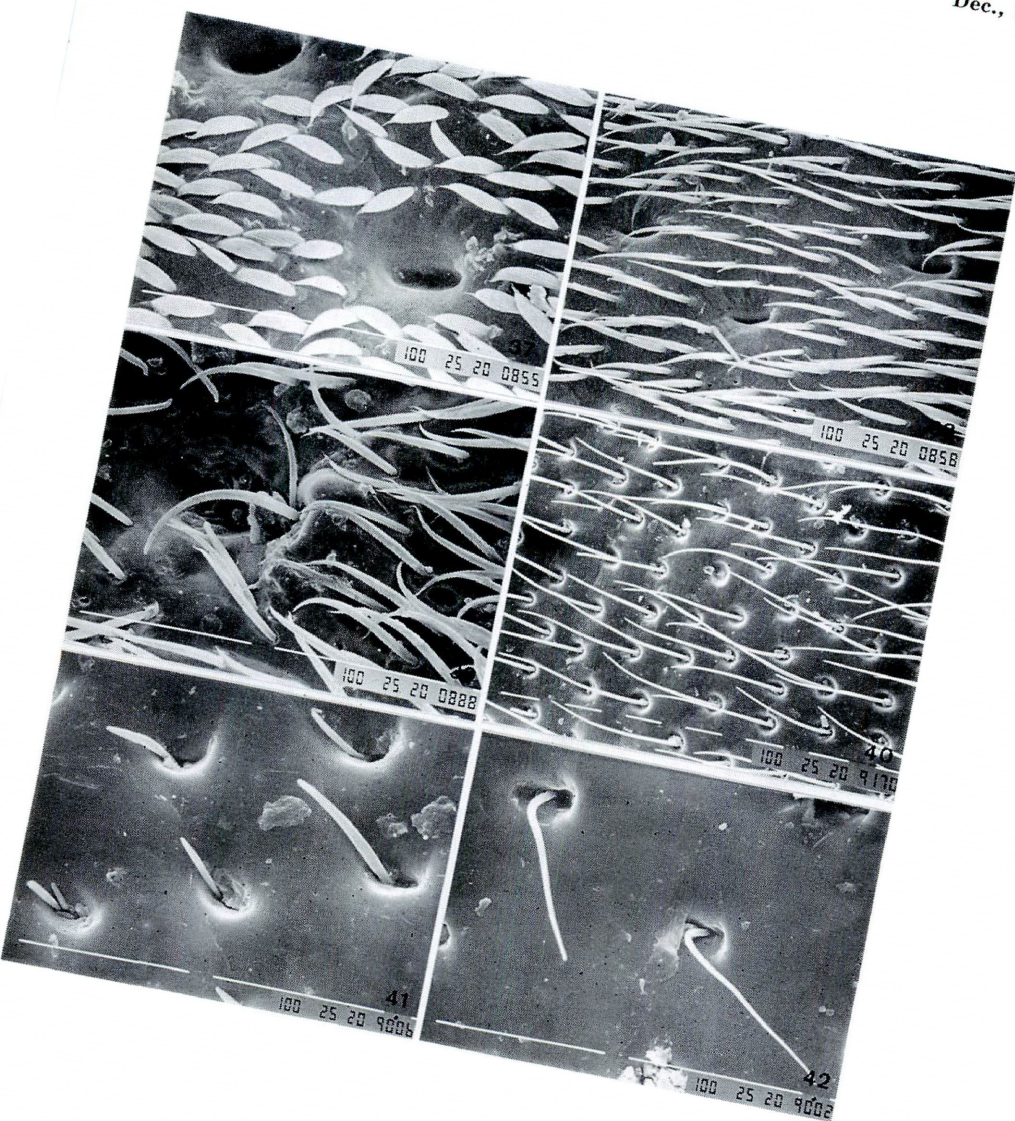




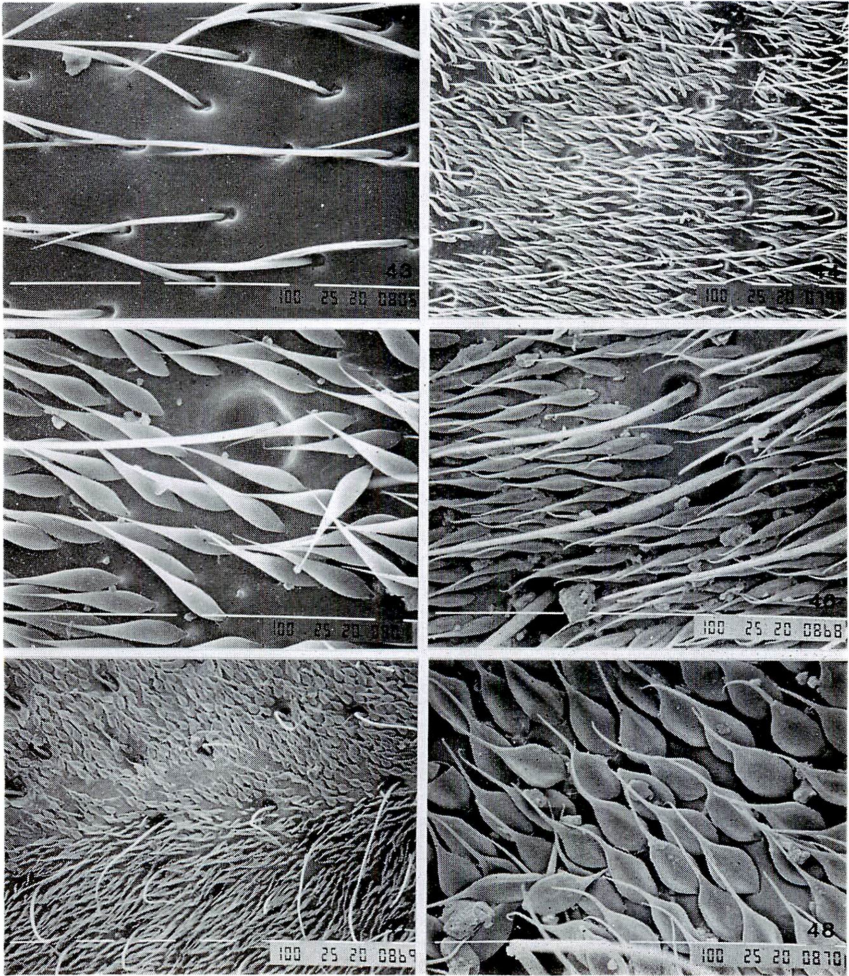


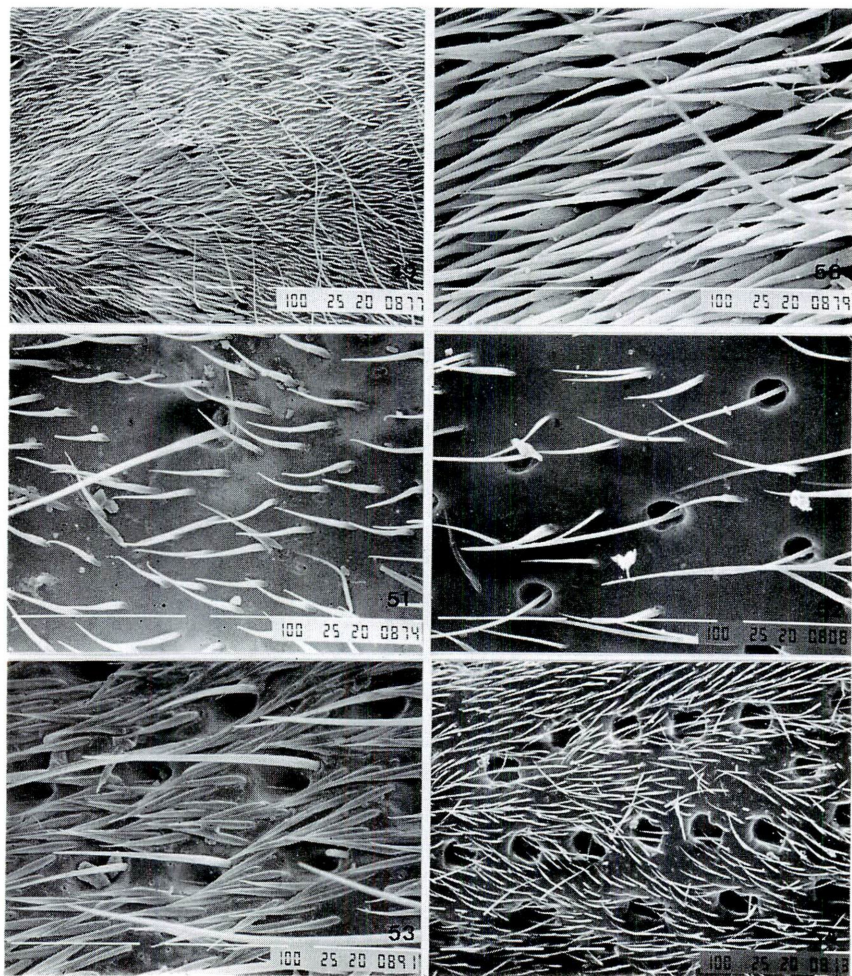
(S. & T. TAMURA photo.)

Dec., 1988.



(S. & T. TAMURA photo.)





山屋茂人氏採集の若干のコメツキムシについて

岸 井 尚

On some Elaterids Collected by Mr. SHIGETO YAMAYA

By TAKASHI KISHII

Biol. Lab. Heian High Sch., Shichijō-Ōmiya, Shimokyō-ku, Kyoto 600

1988年3月上旬、長岡市立科学博物館の山屋茂人氏から、主として南西諸島の一部の島々で同氏が採集したコメツキムシ類の調査を依頼されたが、興味深いものもあり、以下にその同定結果を報告する。

なお、貴重な資料を快くご提供頂いた山屋茂人氏には深い謝意を表するものである。

屋久島

1. *Harminathous suturalis* (CANDÈZE, 1873) フトツヤハダコメツキ (写真4)

1♂, Hirano, 10. VII, 1987.

従来 *nakanei* KISHII の種名で知られていたものであるが、最近鈴木互博士(1987)の研究で上記種であることが判明した。それでこれまで *Scutellathous suturalis* と同定されてきた種の扱いが浮上してきたのであるが、近縁の *comes* LEWIS を含めての今後の研究が必要である。

2. *Hemicrepidius (Hemicrepidius) secessus secessus* (CANDÈZE, 1873)

クロツヤハダコメツキ (写真6)

1♀, Hirano, 19. VII, 1987.

屋久島の低地帯に産するものは明らかに本種であるが、高地帯に見られる小型、軟弱なもので、従来本種の亜種とされていた *satouchii* KISHII は最近大平博士(1987)の研究で独立種であることが判明した *sinuatus* LEWIS の屋久島亜種と見なすべきものであろう。

3. *Hayekpenthès pallidus pallidus* (LEWIS, 1894) ホソキコメツキ (写真7, ♀)

1♂, Hirano, 10. VII, 1987; 1♀, Anbou, 9. VII, 1987.

南西諸島の南部地域産のものでは上翅に黒条が出るが、屋久島以北産ではそのような個体は見られないようである。

4. *Akitsu aquilus ryukyensis* (ŌHIRA, 1968) リュウキュウアシブトコメツキ (写真8)

1♂, Hirano, 10. VII, 1987.

屋久島産種は従来本土に分布する原名亜種とされていたが、前胸背板中央の点刻がより大きく密で、部分的に二重状となるなどの点で、南西諸島に分布する上記亜種とすべきであろう。屋久島の生物相が、一般に九州本土との関連性が濃厚であることはよく知られてはいるが、一方、中には本種のように奄美諸島以南との強い類縁性を持つものもあることは他にも例が多い。

なお、本種の種名として、現在でもしばしば *aquilis* が用いられることが多いが（保育社版、原色甲虫図鑑 III : 78, その他）、CANDÈZE の原記載には *aquilus* とあるので訂正するべきものである。

5. *Ectinus higonius* (LEWIS, 1894) クロムナボソコメツキ

1♂, Hirano, 19. VII, 1987.

一般に、屋久島の個体群では上翅会合線部の白色毛が、九州本土以北産のものより顕著になる傾向が強いようである。

6. *Silesis yaku* KISHII, 1976 ヤククチプトコメツキ（写真9）

1♂, Hirano, 10. VII, 1987.

本種の独立性について、本土に普通に産する *musculus* の亜種とする見方もあるが（大平, 1988）、本属および近縁の *Glyphonyx* 属の種では、周知のように隔離地域間での変異が多く、どの辺までを種または亜種の差とするかという点になると、どうしても研究者の自由裁量的なものがあることは致し方ないものであろう。勿論、そのためには豊富な材料間の比較対照による、研究者の経験もまた決定要因となることは言うまでもない。現在のところ、筆者は屋久島個体群はその特徴ある体型等の固定性から独立種と見なすべきものと考えている。

口永良部島

1. *Agrypnus (Agrypnus) binodulus binodulus* (MOTSCHULSKY, 1861) サビキコリ

1♀, Mukaehama, 17. VII, 1987.

2. *Agrypnus (Sagojyo) yuppe* (KISHII, 1964) ミヅムネヒメサビキコリ（写真5）

2 exs., Mukaehama, 17. VII, 1987.

本種の基本標本産地であるが、奄美諸島から先島諸島にかけて多いようで、本島と黒島を除くと、屋久島などの大隅諸島からはまだ採集例がない。南西諸島特産種であるが、台湾から極めて似た標本が得られている。

3. *Glyphonyx uedai erabuanus*, subsp. nov. エラブクチボソコメツキ（図1）

原名亜種は屋久島の資料に基づいて1977年に記載されたが、その後の再報はない。今回、口永良部島から得られた標本は雌で、諸特徴から判断して本種であることは間違いないが、触角や前胸背点刻の状態、およびその他の多くの特徴から考えると、口永良部島固有の

別亜種と見て差し支えないと思う。原名亜種の *Glyphonyx uedai* KISHII, 1977, Sci. Rep. Kyoto Pref. (Ann. Rep. priv. Schs., Kyoto Pref.), 15: 50-51, figs. 104, 416 & 417 とは下記の点で区別できる。

Female, 5.1×1.4 mm, a little larger, and posterior margin and hind corners of pronotum more or less paler in color compared with those of nominal subspecies. Each antennal joint generally elongate, relative lengths and widths from basal joint to 5th as 20/6, 7/4, 6.5/4, 9/5.5 and 8.5/5 respectively (length/width), and in female paratype of subsp. *uedai* as 20/7, 7/4.5, 6/4, 9/6 and 8/6. Pronotal punctures distinctly larger and denser at medio-anterior area. Prosternal and propleural punctures obviously large and deep. Propleural shagreened triangle zone on latero-outer border clearly broader than that of nominal subspecies. Male unknown.

Holotype, ♀, Mukaehama in Is. Kuchierabu-jima, Kagoshima Pref., 17. VII, 1987, S. YAMAYA leg.

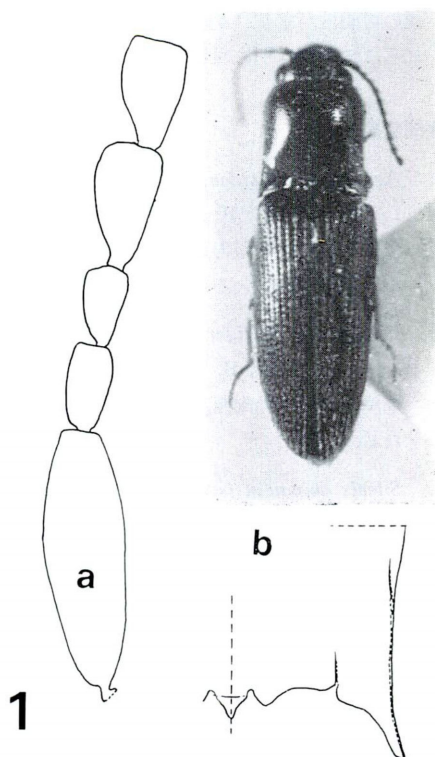


Fig. 1. *Glyphonyx uedai erabuanus* subsp. nov.

a. right antenna from basal joint to 5th. b. pronotal hind corner.

4. *Melanotus (Melanotus) takahashii* KISHII, 1974 タカハシクシコメツキ (写真3)
1♂, Mukaehama, 17. VII, 1987.

本種は記載時、*M. legatus* CANDÈZE の琉球諸島産亜種として発表したものであるが、最近屋久島以南地域の *legatus*, あるいはその近似種を検討した結果、*legatus* は屋久島、口永良部島および中之島に分布する個体群が別亜種で、更に沖永良部島にも別の亜種が分布し、*takahashii* は奄美諸島および沖縄諸島に分布する独立の別種と見なすべきであるとの結論に達した。更に、これら奄美諸島以南の地域からの確実な *legatus* 種と同定出来る個体は見出しえなかった。今回、口永良部島から得られた標本は1頭のみであるが、触角その他の特徴から判断する時、明らかに *takahashii* 種個体群に入るものであった。しかし、詳細に比較検討すると、奄美大島あたりのものとはまたやや異なっており、あるいは別亜

種の可能性がある。いずれにしても、本島にはこれら両種が分布するわけで興味深い。これらについては別に報告する。

座間味島

1. *Agrypnus (Colaulon) miyamotoi ihai* (ÔHIRA, 1967) イハヒメサビキコリ (写真1)
1♀, 8. V, 1987, H. NAKABAYASHI leg.
伊江島から最初報告されたもので、その後、沖永良部島、与論島、沖縄本島および本島からも記録されている。
2. *Chiagosnius vittiger fuscomarginatus* (LEWIS, 1896) クロヘリツヤコメツキ
1♀, 8. V, 1987, H. NAKABAYASHI leg.
奄美大島以南の南西諸島一帯から多くの記録があるが、座間味島からはこれが最初の例となる。
3. *Silesis okinawensis okinawensis* MIWA, 1928 オキナワクチプトコメツキ (写真11)
1 ex., 8. V, 1987, H. NAKABAYASHI leg.
本島からは初めての記録となるが、沖縄本島産のものと異なる点は見当たらない。
4. *Melanotus (Melanotus) takahashii* KISHII, 1974 タカハシシコメツキ (写真2)
1♂, 8. V, 1987, H. NAKABAYASHI leg.
口永良部島の項で述べたように、筆者は従来、*legatus* の亜種群の一つと考えていたのであるが、独立種であることは確かで、座間味島からの記録はこれが最初であろう。沖縄本島産のものと異なる点は見出されなかった。

その他の地域

1. *Ampedus (Ampedus) kai* KISHII, 1986 カイオオアカコメツキ (写真14)
1♀, 山梨県甲斐駒ヶ岳, 5. VIII, 1985, H. Sudô leg.
同じ山梨県の雲取山から得られた雌の資料で記載されたものであるが、これと比べると大分小さく、一見 *optabilis* のように見えるが、触角第3節が長く、前胸背中央点刻が大きく密な点などで *kai* とみなして間違いないと思われる。貯精囊内の刺状突起の形状は明らかに本種のものであるが、その本数は約¾位で少ない。
2. *Ampedus (Ampedus) takaoensis* ÔHIRA, 1973 タカオアカコメツキ (写真13)
1♂, 新潟県奥只見, 4. XI, 1984.
3. *Nothodes marginicollis* (LEWIS, 1894) ウスチャイロカネコメツキ (写真10)
1♂, 新潟県湯沢町八木沢, 24. VII, 1986.
4. *Hypnoidus rivularius rivalis* (LEWIS, 1894) チビヒサゴコメツキ (写真12)
1 ex., 秋田県八幡平, 30. VII, 1985, M. FUJIOKA leg.

秋田県からは既に同じ地域に属する駒ヶ岳から記録されているが、典型的な好寒冷地種で、東北地方以北利尻島までの高地帯から点々とその分布が知られている。最近になって、保田(1984-1986)や大平・保田(1985)により、大雪山地域の本種の分布態様が明らかにされてきたが、それによるとこの地域での地表性甲虫類では圧倒的な優占種と見なして良いようである。本種の種名については、大平博士は独立種として *rivalis* を用いておられ、世界的な観点からこの類をまとめた STIBICK (1978, 1979) は *rivularius* のシノニムと見なしている。*rivularius* とは後翅が退化し、小型な点などで異なるが、それ以上に大きく異なる特徴が見出し難く、筆者としては上記のように扱うことにする。

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- 1986. 上川町(大雪山・石狩川源流地域)の甲虫類, XI. 同上, 11 : 97-103.

第20図版写真説明

1. *Agrypnus (Colaulon) miyamotoi ihai* (ÔHIRA, 1967) イハヒメサビキコリ, ♀, 9.2 mm.
2. *Melanotus (Melanotus) takahashii* KISHII, 1974
タカハシクシコメツキ, ♂, 座間味島, 15.6 mm.
3. Ditto, ♂, 口永良部島, 14.1 mm.
4. *Harminathous suturalis* (CANDÈZE, 1873) フトツヤハダコメツキ, ♂, 16.8 mm.
5. *Agrypnus (Sagojyo) yuppe* (KISHII, 1964) ミゾムネヒメサビキコリ, ♂, 12.4 mm.
6. *Hemicrepidius (Hemicrepidius) secessus secessus* (CANDÈZE, 1873)
クロツヤハダコメツキ, ♀, 14.5 mm.
7. *Hayekpenthès pallidus pallidus* (LEWIS, 1894) ホソキコメツキ, ♀, 9.6 mm.

8. *Akitsu aquilus ryukyuensis* (ÔHIRA, 1968)

リュウキュウアシブトコメツキ, ♂, 9.2 mm.

9. *Silesis yaku* KISHII, 1976 ヤククチブトコメツキ, ♂, 8.0 mm.

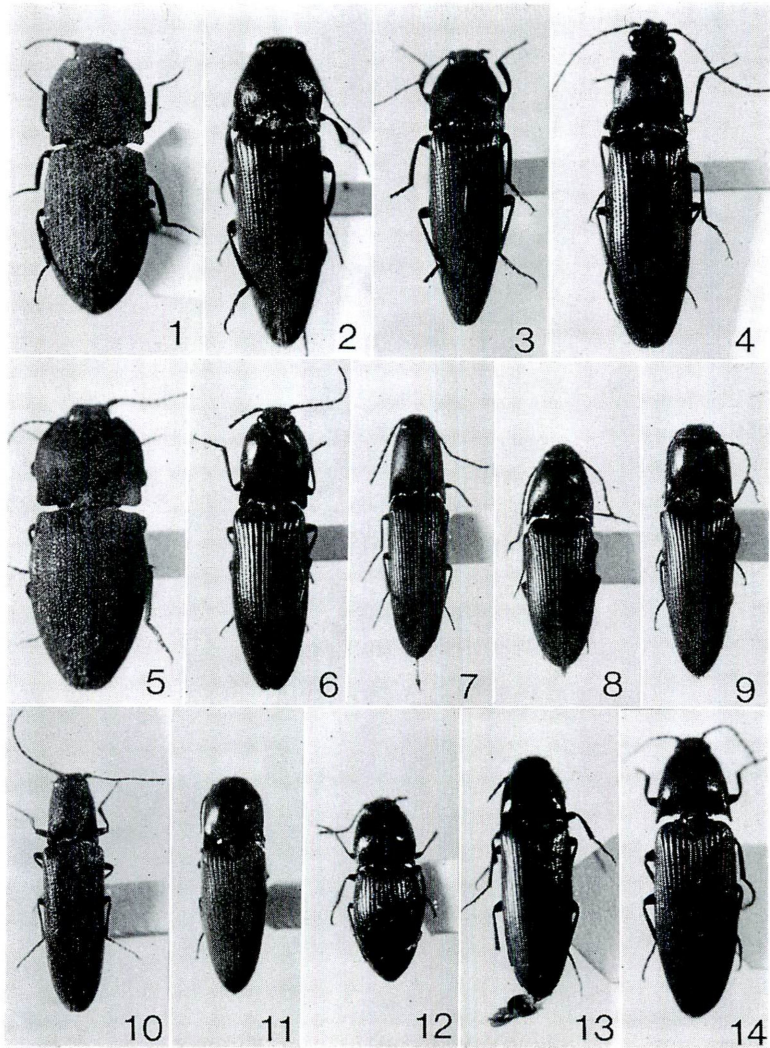
10. *Nothodes marginicollis* (LEWIS, 1894) ウスチャイロカネコメツキ, ♂, 7.9 mm.

11. *Silesis okinawensis okinawensis* MIWA, 1928 オキナワクチブトコメツキ, 7.2 mm.

12. *Hypnoidus rivularius rivalis* (LEWIS, 1894) チビヒサゴコメツキ, 4.8 mm.

13. *Ampedus (Ampedus) takaoensis* ÔHIRA, 1973 タカオアカコメツキ, ♂, 9.2 mm.

14. *Ampedus (Ampedus) kai* KISHII, 1986 カイオオアカコメツキ, ♀, 14.0 mm.



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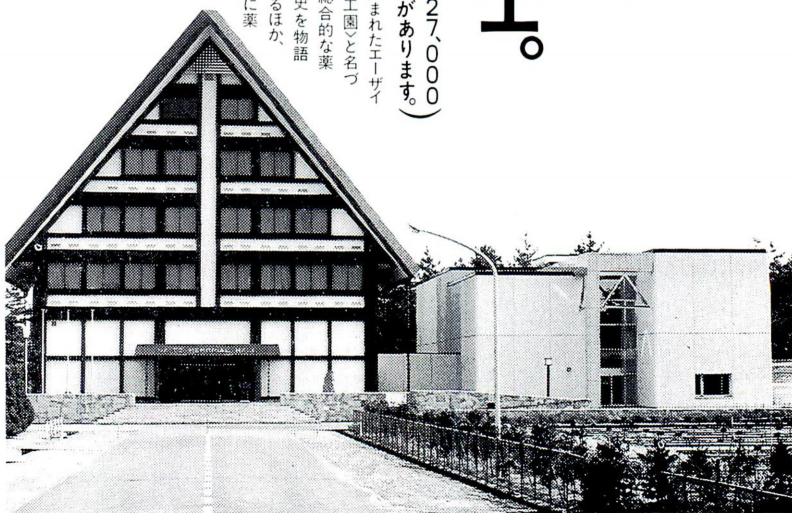


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